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The impact of IS/IT strategy and business strategy alignment on business performance in the Palestinians firms

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II

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By

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الإقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

The impact of IS/IT strategy and business strategy alignment on business performance in the Palestinians firms

أثر توافق استراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) وإستراتيجية العمل على أداء العمل في الشركات الفلسطينية

اقر بأن ما اشتملت عليه هذه الرسالة إنما هو نتاج جهدي الخاص، باستثناء ما تمت الإشارة إليه حيثما ورد، وان هذه الرسالة ككل، أو أي جزء منها لم يقدم من قبل لنيل أية درجة علمية أو بحث علمي أو بحثي لدى أية مؤسسة تعليمية أو بحثية أخرى.

DECLARATION

The work provided in this thesis, unless otherwise referenced, is the researcher’s own work, and has not been submitted elsewhere for any other degree or qualification.

Student's name: ……………………......………………… :اسم الطالب

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Date: ………………………………………… : التاريخ

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ABBREVIATIONS

IS	Information System
IT	Information Technology
CEO	Chief Executive Officer
CIO	Chief Information Officer
UKAIS	UK Academy of Information Systems
ROI	Return Of Investment
MIS	Management Information System
ICT	Information and Communication Technology

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ABSTRACT

The incredible growth of the information systems (IS) and information technology (IT) during the last two decades has clear, direct and huge impacts on all life sides, especially in the business. It is becoming a strategic enabler of new ways of doing business. Furthermore it plays the key role of doing business. It is involved in all business functions. In addition, Technology such as the internet and E-business has caused many companies to review their business and IT strategies and adopt the alignment philosophy to enhance their position, achieve business objectives and fully utilize the investment in the technology. According to studies reviewed information technology strategy and business strategy alignment is a hot topic. Moreover, it is considered as one of the top managers concerns. Alignment is a dynamic, complex process that takes time to develop and even more effort to sustain.

This research aims to test if the alignment between IS/IT strategy and business strategy have an impact on the business performance in the Palestinians firms. To achieve this purpose the researcher used both qualitative and quantitative research methodologies. Qualitative data were

collected via interviews with many CIO's and CEO's and consultants to make sure that our statistical findings agree with the reality of the Palestinian firms. Moreover, to provide a more description and understanding about the alignment in the Palestinian firms. In addition, the quantitative part based on previous research by titled *"Alignment between business and IS Strategies, a study of prospectors analyzers and defenders"*. Furthermore, data were gathered from the research population which consist of 46 Palestinians firms that are listed in the Palestine exchange via a survey. The response rate of survey was (46%).

Results indicate that there is a positive correlation between business strategy and IS/IT alignment and business performance in the Palestinians firms, the correlation coefficient value was (0.27).

Based on the research findings, Palestinian firm should perform studies and researches to determine the best business strategy that fits their business environment and fit the Palestinian market. Furthermore, Firms should focus more on the IS/IT strategies. Moreover, make studies and researches even take consultations before investment in IS/IT, to make sure that the new investment is right and fit the firm business strategy. Eventually, firms should Review the firm business strategy and IS/IT alignment continuously, and consider this process as management duty, due to the alignment impacts on improving business performance.

Chapter One

INTRODUCTION

Chapter One

Introduction

1. Introduction

1.1. Overview

This chapter aims to introduce an overview of the research title, problem statement, research questions, research objectives, and the structure of the thesis.

1.2. Problem Statement

All research emphasized the importance of the strategy and how it clearly improves and affects the business. Moreover, in the last decades information technology and information system played a major significant role in the business. IT sector plays a vital role in the Palestinian economy. It grows in a quick pace. Therefore, this research aims to understand the relation between two fields: business strategy and IS/IT strategy. Moreover, to explain the relation and the impact of the alignment between them on the overall business performance in the Palestinian's firms.

1.3. Motivation to Conduct the Research

The issue of achieving IT-business alignment was first documented in the late 1970s and was in the Top-10 IT management issues from 1980 through 1994, as reported by the Society for Information Management (SIM). Since 1994, it issued #1 or #2. These results are consistent with other studies, such as CSC's survey rankings and The Conference Board's

surveys of CEOs (Luftman and Kempaiah, 2007). Furthermore, the annual survey on top management concerns by the Society for Information Management (www.simnet.org) ranked ‘IT and Business alignment’ as the No. 1 concern for four years in a row (Society of Information Management, 2003, 2004, 2005, 2006) (Silvius, 2007).

After many years of research about business and IT alignment, (Chan and Reich, 2007) list over 150 studies, the prominent position of business and IT alignment as one of the top concerns and they consider it as a hot topic. Moreover, Chief executive officers (CEOs) considered Information technology as critical factor for management success to achieve firms’ objectives, by giving right management information at the right time (Khandelwal, 2001). It’s obvious that there are no many research about IS/IT alignment in Palestine, so this important factor deserves to be studied, Moreover, to know the impact of the alignment on overall business performance in the Palestinians’ firms. As a consequence, to determine if it deserves that Palestinians firms which need to improve their performance focus at alignment of IS/IT strategy and business strategy.

1.4. Research Questions

To answer the research problem the following questions are raised:

1. Do the Palestinian firms have business strategy? And IS/IT strategy?
2. Are the Palestinians’ firms’ strategy and IS/IT strategy aligned?
3. What is the Impact of alignment business strategy and IS/IT strategy on the business performance of Palestine’s firms?

1.5. Research Objectives

The research aims to achieve the following objectives:

1. To document the current level of using business strategy and information technology strategy in the Palestinian firms.
2. To document the current level of awareness of the impacts of IS/IT in the Palestinian firms business.
3. To determine the current level of IS/IT support shaping the business objectives and strategies in the Palestinian firms.
4. To document, How does the Palestinian firms business strategy affect IS/IT and organizational decisions.
5. To know if alignment process is competitive advantage for the Palestinian firms or not.

1.6. Research Hypotheses

The researcher depends on popular (Miles & Snows) business strategy typology of defender, analyzer and prospector. The following hypothesis about business strategy typology and the alignment has been inferred:

- H1: The alignment between business strategy and IS strategy is positively associated with perceived business performance in the Palestinian Firms.
- H2: For Defenders, the alignment between IS strategy and the "IS for efficiency" strategy is positively associated with perceived business performance in the Palestinian Firms.

- H3: For Prospectors, the alignment between IS strategy and the "IS for flexibility" strategy is positively associated with perceived business performance in the Palestinian Firms.
- H4: For Analyzers, the alignment between IS strategy and the "IS for comprehensiveness" strategy is positively associated with perceived business performance in the Palestinian Firms.

The definitions of business strategy types (Defenders, Prospectors and Analyzers) exist on (2.2.1.1 Business Strategy typology page number 10).

1.7. Structure of the Thesis

CH 1: INTRODUCTION

CH 2: LITRITURE REVIEW

CH 3: RESEARCH METHODOLOGY

CH 4: FINDINGS AND RESULTS

CH 5: CONCLUSIONS AND RECOMMENDATIONS

Figure 1-1: Structure of the thesis.

Chapter Two

LITERATURE REVIEW

Chapter Tow

Literature Review

2. Literature Review

2.1.Information System (IS) and Information Technology (IT)

Before providing any strategic perspective, it is important that there is a clear understanding of the distinction between the terms information systems (IS) and information technology (IT). While both terms are often used interchangeably, at the beginning information is defined as “data that have been organized so they have meaning and value to the recipient” (Turban and Volonino, 2010).Whilst, Information technology refers specifically to technology, essentially hardware, software and telecommunications networks. It is thus both tangible (e.g. with servers, PCs, routers and network cables) and intangible (e.g. with software of all types). IT facilitates the acquisition, processing, storing, delivery and sharing of information and other digital content (Ward and Peppard, 2002). According to (Reynolds, 2010) information technology is defined as “includes all tools that capture, store, process, exchange, and use information. IT includes Hardware such as computers and servers; software such as operating systems and applications for performing various functions; networks such as modems and routers; and databases for storing important data”. The set of IT hardware, software and networks is called its IT infrastructure. In contrast, The UK Academy of Information Systems (UKAIS) defines information systems as “the means by which people and organizations, utilizing technology, gather, process, store, use and disseminate information”. Some information systems are totally automated by IT. For example, Dell Computers has a system where no human

intervention is required, from taking customer orders, to delivery of components to the Dell factory for assembly, to shipment to customers (Ward and Peppard, 2002).

In this research the term of IS and IT are used interchangeable just for simplification.

2.2. Strategy

Historically, the study of strategy was the preserve of the military, indeed the word “strategy” comes from the Greek stratus=”army”. How do we achieve something in the future (we had that before) (Thomson and Baden-Fuller, 2010). According to (Cannon, 2011) Strategy is defined as “an adaption of behavior or structure with an elaborate and systematic plan of action”. Another more specific definition of strategy is “to create a fundamental change in the way the organization conducts business”.

(Issa-Salwe et al., 2010) distinguish between strategic plan and operational plan they argue that A strategic plan is not the same thing as an operational plan. The former should be visionary, conceptual and directional in contrast to an operational plan which is likely to be shorter term, tactical, focused, implementable and measurable. As an example, compare the process of planning a vacation (where, when, duration, budget, who goes, how travel are all strategic issues) with the final preparations (tasks, deadlines, funding, weather, packing, transport and so on are all operational matters). Furthermore, (Henderson and Venkatraman, 1993) argue that strategy involves both formulation and implementation based on

where (market) and with what (product) to operate and secondly what skills and structure they will need to succeed.

2.2.1. Business Strategy

Over the years there have been many attempts at defining business strategy. According to (Porter, 1996) The essence of strategy is in the activities choosing to perform activities differently or to perform different activities than rivals. Otherwise, a strategy is nothing more than a marketing slogan that will not withstand competition. Strategy is the creation of a unique and valuable position, involving a different set of activities, Strategy is making trade-offs in competing. Furthermore, Strategy is creating fit among a company's activities. The success of a strategy depends on doing many things well–not just a few– and integrating among them. According to (Mintzberg, 1987) strategy is a plan – some sort of consciously intended course of action, a guideline (or set of guidelines) to deal with situation. (Kourdi, 2009) defines Business strategy as the plan, choices and decisions used to guide a company to greater profitability and success. (Strecker, 2009) In a business context, strategy is defined as a stream or pattern of major decisions to achieve a firm's long-term goals. (Gartlan and Shanks, 2007) Define it as an analytical management tool used for planning a future business path. It addresses the internal and external business environment, the approach to competition, vision and allocation of company resources and which calls on strong commitment in its formulation and execution. (Thackrah, 2008) defines business strategy as the setting of a future direction for the business, whilst considering the

market it operates in, the competition and the resources it applies. Moreover, (Thomson and Baden-Fuller, 2010) define the business level strategy as: A pattern of important decisions, implemented over time affecting the long-term direction and scope of the individual business unit in the ever changing competitive environment. The decision will give the firm an advantage over the competitors in the market place by better serving the customers. Competitive strategy according to (Porter, 1996), is about being different. It means deliberately choosing a different set of activities to deliver a unique min of value.

According to (Cragg et al., 2002), they Highlights that there is a different perspectives of large and small firms in their definition of business strategy. The main difference is that large firm have single strategy but the small firms have multiple business strategies.

2.2.1.1. Business Strategy typology

Over the last decades there were many attempts to classify the business strategy. One of the most popular classifications belongs to Porter (Porter, 1996), he introduced the concept of “generic strategies” (cost leadership, differentiation, and focus) to represent the alternative strategic positions in an industry. Whilst, the most popular business strategy typology ever, belongs to Miles and Snow’s (Xiaoying et al., 2008), they defined three viable business strategies: prospectors, defenders, and analyzers. A prospector: is an organization with an aggressive competitive strategy that attempts to pioneer in the product/market development, a

defender is an organization with a conservative competitive strategy and engages in little or no new product development, An analyzer as an intermediate type, is an organization with a moderate competitive strategy that makes fewer and slower product/market changes than a prospector and is less stable than a defender (Xiaoying et al., 2008).

2.2.2. IT/IS Strategy

The companies also feel the effects of IS/IT implementation as some try to, “find the best solution for the customer to fit his needs and requirements, for the available IT vendors, if not try to develop some products based on the needs, based on our experience.” Most of the planning depends on the customer needs, and is based on the customer business. As most of our customers are looking to the IT as Return of investment (ROI). So our main aim is to use the IT to meet the customer’s needs, business continuity and cost reductions. Most of the planning is based on the high level available solutions and how to secure the business, moreover reduces the risk (Issa-Salwe et al., 2010).

The IT strategy often is derived directly from the organization’s strategy. Developing an IT strategy is a critical organizational process. This process will become more important as the strategic necessity of IT increases. After all, IT is a tool of which the value is based on its ability to support organizational plans and activities (Glaser, 2006).

There is no specific definition for IT strategy or IS strategy, back to literature, according to (Issa-Salwe et al., 2010) IS strategy can be defined

as how to implement information systems that recognizes organizational requirements, in other words 'demand' for the information and systems to support the overall business strategy and its plan to gain or maintain the advantage. Whilst, (Chenet al., 2010) defines IS strategy as the organizational perspective on the investment in, deployment, use, and management of information systems.

(Gartlan and Shanks, 2007) Define IT strategy as business tool used to structure a future path and addresses the use and management of IT resources, business IT relationships both internal and external and the flow and storage of information throughout the organization. According to (Thackrah, 2008) An IT strategy is defined as the use of information technology resources to facilitate the flow of information to the right place at the right time to enable a business to deliver on its objectives (Turban and Volonino, 2010) defines Information technology strategy as "defines the IT vision, how the infrastructure and services are to be delivered", the Information technology vision is "the longer-term direction for IT; defines the future concept of what IT should do to achieve the goals, objectives, and strategic position of the firm".

The core intent in developing an IT strategy is to ensure that there is a strong and clear relationship between IT investment decisions and the organization's overall strategies, goals, and objectives. In the course of developing an IT strategy, an organization may fall victim to three major misconceptions about IT strategy. Those misconceptions are:

- The IT strategy should be solely derived from a thorough review of organizational strategies and plans.
- The IT strategy should be dominated by a focus on defining needed application systems.
- The IT strategy is better if it is developed by using a rigorous methodology.

These misconceptions are dangerous. While they are right, they are not completely right. Hence, a dogmatic approach embracing these misconceptions risks an incomplete IT strategy or a strategy that is not as aligned with the organization as it should be (Glaser, 2006).

As mentioned before, in this research the term of IS and IT will be used interchangeable just for simplification.

2.3. IT/ IS in Business

Technology and the business climate are changing far too quickly (Luftman and Brier, 1999). According (Voloudakis, 2005) proposition of the evolution of technologies in business emphasizes the need for information systems strategies to enable the real-time optimization of the value chain. It is echoed throughout the literature that information technology strategies need to be aligned with business strategies. Moreover, IT has been merely an implementation tool, not intrinsically involved in shaping strategy. Now though, as more and more new business opportunities and channels to market are created by technology developments. Most of firms have great expectations of their investment in

IT for the future benefits of the business, expectations that will enable the business to reduce costs, Standardize processes, Enhance productivity Improve workflow and communications, Sustain repeatable service levels, Improve Risk control mechanisms, Implement new business strategies, Facilitate organic and acquisition-driven growth, Gain competitive advantage by exploiting new technology (Beveridge, 2002). The business executives understand the significance of IS/IT systems. The overall benefits that the companies could get are improved business processes, enhanced effectiveness of the business processes and increased customer satisfaction (Issa-Salwe et al., 2010). Furthermore, IT plays an increasing role in defining corporate strategies, its correct application will facilitate a more competitive and profitable organization. The careful assessment of a firm's alignment is important to ensure IT is being used to appropriately enable or drive the business strategy (Luftman and Brier, 1999). (Issa-Salwe et al., 2010) argue that changes in strategy, rules, and procedures increasingly require changes in hardware, software, databases, and telecommunications (see Figure 2-1). The relationship between information systems and organizations results from the growing reach and scope of system projects and applications.

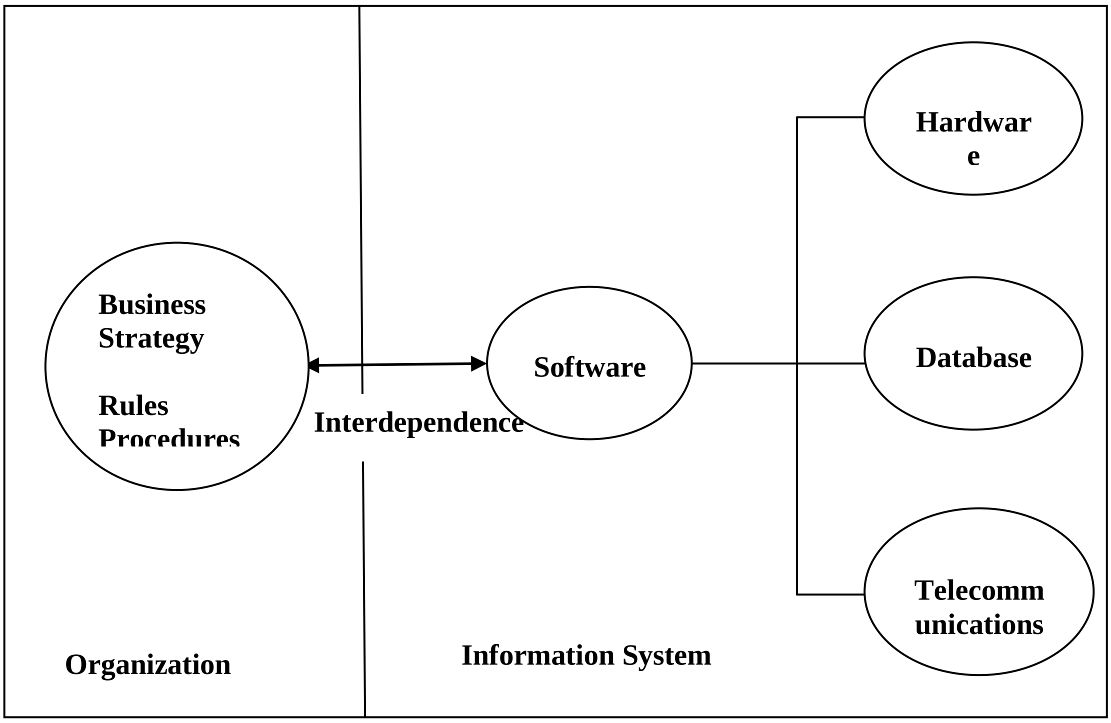


Figure 2-1 (Issa-Salwe et al., 2010): Relationship between information systems and organizations.

2.4.Strategic Alignment

2.4.1. Alignment Definitions

Many authors define business and Information technology strategy alignment from various perspectives, some depend on experience, and others are more theoretical. According to (Silvius, 2007) calls Alignment 'fit' (Venkatraman, 1989), called it 'harmony' (Luftman et al., 1993), called it 'integration' (Weill and Broadbent, 1998) called it 'linkage' (Henderson and Venkatraman, 1993), calls it 'bridge' (Ciborra, 1997) or 'fusion' (Smaczny, 2001).

A number of attempts have been made to define strategic alignment, but still there is little consensus on what Business and IT alignment really is.

1. (Iman and Hartono, 2007) define the term "strategic alignment" consists of the words "alignment" and "strategy." Alignment is

coordination achieved when the company information technology/systems strategy is derived from the organization strategy.

2. (Chan et al., 1997) describe business – IT alignment as “the fit between business strategic orientation and information systems strategic orientation”.
3. (Henderson and Venkatraman, 1993) state that alignment is the degree of fit and integration among business strategy, IT strategy, business infrastructure, and IT infrastructure.
4. (Turban and Volonino, 2010) define Information technology - business alignment as “the Degree to which the IT group understands the priorities of the business and expends its resources, pursues projects, and provides information consistent with these priorities”.
5. According to (Chan and Reich, 2007) Strategic alignment refers to the degree to which the business strategy and plans, and the IT strategy and plans, complement each other.
6. While (Silvius, 2007) defines business & IT Alignment as the degree to which the IT applications, infrastructure and organization, the business strategy and processes enables and shapes, as well as the process to realize this.
7. According to (Issa-Salwe et al., 2010) alignment as defined as “the capacity to demonstrate a positive relationship between information systems and the accepted financial measures of performance”.
8. (Gartlan and Shanks, 2007) Alignment of business and IT strategies involves the cohesive and concurrent formulation of common business and IT strategies, and the process of formulating the strategies is reciprocal in nature.
9. (Carrelhas, 2010) Strategic Alignment is defined as the inherently dynamic fit between external and internal business domains, such as

the product/market, strategy, administrative structures, business processes and IT.

10. (Thackrah, 2008) IT alignment is the process of developing an information technology strategy that enables the business strategy and allows bidirectional collaboration between the two strategies.

The concept of strategic alignment has several pseudonyms but all of them have the same meaning, which is concerning the integration of strategies relating to business and its IT/IS (Carrelhas, 2010). Strategic alignment focuses on the activities that management performs to achieve cohesive goals across the IT and other functional organizations (e.g., finance, marketing, H/R, manufacturing). Therefore, alignment addresses both how IT is in harmony with the business, and how the business should, or could be in harmony with IT. Alignment evolves into a relationship where the function of IT and other business functions adapt their strategies together. Achieving alignment is evolutionary and dynamic (Luftman, 2000).

2.4.2. Alignment Types

Alignment is a dynamic, complex process that takes time to develop and even more effort to sustain. Companies that have achieved alignment can build a strategic competitive advantage that will provide them with increased visibility, efficiency, and profitability to compete in today's changing markets (Luftman and Brier, 1999).

(Silvius et al., 2009) state are two concepts of information technology and business alignment first one focuses on planning and objectives integration, and views alignment as the degree to which the business

mission, objectives and plans are supported by the IT mission, objectives and plans. The other is the fit between functional domains, business and IT, on different levels.

There are several models and frameworks' that developed to manage, improve and assessing maturity of information technology and business alignment. Colin Beveridge (Beveridge, 2002) develops Guidelines to formulate a plan to align and to manage the alignment process. Henderson and Venkatraman (Henderson and Venkatraman, 1993) the most wide spread alignment model, It is a framework for comparing and analyzing the IT department goals, objectives and activities to the goals, objectives and activities of the firm. Luftman (Luftman, 2000) developed a Business and IT Alignment Maturity model. In his model six criteria are used to determine the maturity of the alignment of IT and business and he put five levels of strategic alignment maturity.

2.5. Alignment Impacts

2.5.1. General impacts

Information technology dramatically changed all firms' way of dealing with business; it's becoming a strategic enabler of new offerings and new ways of doing business. Whereas IT create many benefits like rise in employee productivity to the creation of innovative new products and services that would have been impossible a decade ago IT's coming of age has also brought new challenges for leaders (Voloudakis, 2005). Organizations that have been able to successfully integrate technology and business strategy have created significant business returns. IT has become

an important enabler of business strategies in such areas of mass customization, competitive differentiation, quality improvements, and process automation and improvement (Weiss and Anderson, 2004). Moreover, technology helps improve efficiency and reduce transactional costs; disparate systems across an enterprise are inadequate to support business strategies of the new economy in the 21st century where the focus of production efficiency is replaced by the value creation throughout the demand and supply chains (Joseph and Chan, 2005). Furthermore, Company officers that have aligned IT with business strategies argue that the integration was crucial to the firm's survival and its success. IT organizations have added value to a firm's effectiveness by acting as change agents, focusing on business imperatives, and helping to achieve effectiveness and efficiency (Weiss and Anderson, 2004).

Historically, much research has proven that information system-based applications are capable of providing competitive advantage based on generic strategies such as cost leadership, product differentiation, and market focus (Iman and Hartono, 2007). According to literatures there are many impacts of alignment:

1. Alignment generates integration into a smoothly working business system and improves productivity. Furthermore, it assists in transforming information into a usable form for coordinating the workflow within the organization, and helps in decision making and solving other problems. (Issa-Salwe et al., 2010)
2. Alignment deliver competitive advantage in the marketplace (Henderson and Venkatraman, 1993), (Carrelhas, 2010), (Issa-Salwe

et al., 2010), (Luftman and Brier,1999) and (Kearns and Lederer, 2001).

3. A key success factor for a successful company is an effective and efficient alignment of the way IT is supporting business strategies and processes (Silvius et al., 2007).
4. A direct advantage of strategic alignment is a perception of higher business value of IT/IS (Issa-Salwe et al., 2010).
5. (Luftman and Brier, 1999) similarly declares, “Companies that have achieved alignment can build a strategic competitive advantage that will provide them with increased visibility, efficiency, and profitability to compete in today’s changing markets.
6. (Carrelhas, 2010) The strategic alignment, generally, assists organizations by maximizing return on IT investment, by helping to achieve competitive advantage by providing direction and flexibility to react to new opportunities.
7. Strategic alignment is related to payoffs from IT at the process-level. From this, we can conclude that firms that use IT to provide greater support for the business strategy will realize greater payoffs from IT (Tallon and Kraemer, 2003).
8. alignment between IT usage and project characteristics was associated with improvements in project competencies, as well as project performance, measured in terms of project cycle time, cost, quality, and on-time completion (Bardhan et al., 2007).

2.5.2. Performance impacts

In the management information system (MIS) literature, several dimensions of alignment are clearly apparent: strategic/intellectual, structural, social, and cultural. Although significantly more attention is

given to strategic IT alignment, both strategic alignment and structural alignment influence performance. In addition, alignment is contingent on many of the social and cultural aspects of an organization (Chan and Reich, 2007).

There are many researches in the literature that noted the impact of strategic alignment overall business performance:

1. The business and IT performance implications of alignment have been demonstrated empirically and through case studies during the last decade. Simply put, the findings support the hypothesis that those organizations that successfully align their business strategy with their IT strategy will outperform those that do not. Alignment leads to more focused and strategic use of IT which, in turn, leads to increased performance (Chan and Reich, 2007).
2. Generally, the better the fit, the better the performance (Cragg et al., 2002).
3. The importance of strategic business and IT alignment has been reported as an organization-wide issue that directly impacts the company's overall performance (Silva et al., 2006).
4. Many academic and practitioners' studies have shown that misalignment or lack of alignment between IT and business strategies is one of the main reasons why enterprises fail to exploit the full potential of their IT investments. Furthermore, organizations that have accomplished a high degree of alignment are often associated with better business efficiency and effectiveness performance (Silva et al., 2006).
5. "Our research, and others' research, found positive correlations between the maturity of IT-business alignment and (1) IT's

organizational structure, (2) the CIO's reporting structure and (3) firm performance" (Luftman and Kempaiah, 2007).

6. An excellent strategic alignment of business strategy and information systems strategy will lead the information system to a crucial point, which eventually boosts business performance (Iman and Hartono, 2007).
7. Companies that appear to perform best are companies in which there is alignment between realized business strategy and realized information systems strategy (Chan et al., 1997).
8. Alignment of business and IT is believed to improve organizational performance through mechanisms including governance processes, human resources and technological capabilities (Henderson and Venkatraman, 1993).

Researches on IT and business strategy alignment has shown positive linkages among competitive strategy, information technology, and performance. Moreover, Organizations that have successfully aligned IT and business strategies on average pay 17% less on IT per user than those who fail to align (Weiss and Anderson, 2004).

Clearly, business leaders should be seeking ways to achieve successful alignment between IT and business strategies. The alignment of business and IT strategy has consistently been found to be a major concern for business executives (Gartlan and Shanks, 2007).

2.6. Alignment Challenges

Many academic and practitioners' show that misalignment or lack of alignment between IT and business strategies is one of the main reasons

why enterprises fail to exploit the full potential of their IT investments. (Silva et al., 2006) argue that organizations that have accomplished a high degree of alignment are often associated with better business efficiency and effectiveness performance.

Major reasons for alignment failure as related to executive roles include: the inability to maintain internal and external business and IT relationships, failure to implement change, lack of senior management support, and a culture that refuses to shift (Weiss and Anderson, 2004). More specifically, Lufman and Brier (Luftman and Brier, 1999) made a significant research over 500 firms in 15 industries, in addition to surveys they used interviews and observations from consulting engagements, As a consequence of all these data analysis they found that there are six important enablers and inhibitors, in rank order are:

Table 2-1: Relevant situation for different study strategies

ENABLERS		INHIBITORS
1.	Senior executive support for IT	IT/business lack close relationships
2.	IT involved in strategy development	IT does not prioritize well
3.	IT understands the business	IT fails to meet commitments
4.	Business - IT partnership	IT does not understand business
5.	Well-prioritized IT projects	Senior executives do not support IT
6.	IT demonstrates leadership	IT management lacks leadership

Source: Luftman and Brier, 1999

2.7. Alignment GAP

There is a lot of literature about business-IT strategic alignment that are concerned with issues of control of resources rather than managing relationships. Although the alignment gap represents an important concept in business-IT strategic alignment, it has not been presented or discussed explicitly in business-IT strategy context. Moreover, in all the literature that the researchers have studied, there was no evidence as to who has referred to the concept of alignment gap between business strategy and IT strategy (Majali and Dahlin, 2010). The concept of alignment gap between business strategy and IT strategy has actually appeared due to the fact that there is a separate organizational unit in the business firm or organization, often an IT department, which is responsible for IT activities. That has led to the emergence of the gap between them so called IT organization and the rest of the business (Shamekh, 2008).

Many academic and practitioners' studies have shown that misalignment or lack of alignment between IT and business strategies is one of the main reasons why enterprises fail to exploit the full potential of their IT investments. Furthermore, organizations that have accomplished a high degree of alignment are often associated with better business efficiency and effectiveness performance (Silva et al., 2006). Given the fact that both business strategy and IT strategy should aim to satisfy the same business objectives, it is clear that strategic alignment gap can be noticed in strategic actions taken by both business executives and IT executives. However if these actions are not consistent with each other, the

management practices by both business executives and IT executives are taken separately which creates the alignment gap between business strategy and IT strategy (Shamekh, 2008) .

Previous researchers found that managers were more comfortable with their ability to comprehend business positioning choices (i.e., where products are sold) rather than IT positioning choices (i.e., critical technology to support business strategies). This was attributed to the fact that strategy has typically been viewed as something applied to the output market, and that IT has typically been viewed as an internal response (or an input) to business strategy as opposed to something that leverages business strategy (Chan and Reich, 2007) .

However, there are risks in using IT to initiate new strategies and transform business, highlighted by the apparent gap between the decision to invest in IT and the realization of benefits. Consequently, the co-operation between business and the IT department to maximize investment in technology is vital and the objectives have to be considered together (Carrelhas, 2010). According to (Thackrah, 2008) he argues that the following make the alignment / integration difficult.

1. Organizational structural deficiencies
2. Communications problems between management, IT staff. Other studies confirm this with the finding that it is critical for IT Units not to isolate themselves from business
3. Strategic management model deficiencies
4. The highly contingent nature of strategy

(Cragg et al., 2002) warn that alignment can give rise to pathologies that require careful management if undesired business and IT costs are to be avoided. Three types of pathological outcomes from strategic alignment are identified:

- Misalignment, which occurs when a company tries to align IT with business strategies that are not internally consistent.
- IT stagnation, which occurs as part of a common, almost natural, cycle of innovation.
- IT globalization, which presents special scale and cultural difficulties for alignment.

If IT researchers produce manuscripts that call for high alignment in these potentially difficult and pathological situations, they are doing a disservice to practitioners.

According to (Shamekh, 2008), to determine or distinguish the nature of the alignment gap, there is an identified initial framework that can help in diagnosing and describing alignment gap in greater details. This framework identifies four interdependent dimensions which are represented in: leadership; structures and processes; service quality; and value and beliefs which are depicted in Figure 2-2. These four dimensions are addressed within the context of the organization's strategy and are briefly defined as:

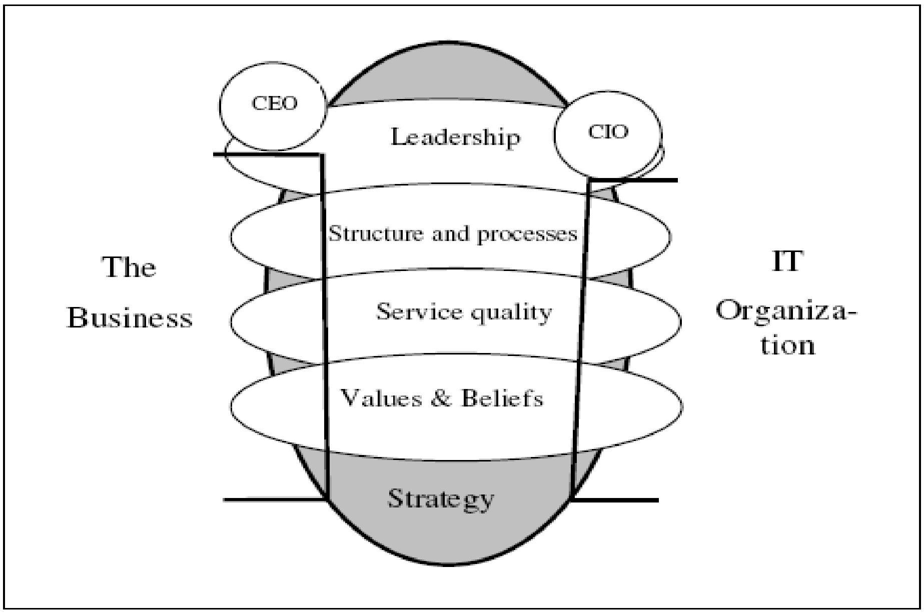


Figure 2-2: Framework for diagnosing the alignment gap, source: (Shamekh, 2008)

1. *Leadership*: Leadership refers to the role of the CEO in relation to IT activity as well as the CIO in relation to business management activity. The director's ability to add value is the biggest factor in determining whether the IT is a business enabler (asset) or business driver (liability).
2. *Structures and processes:* Structures and processes refer to the mechanisms through which organizational activity takes place. This dimension is concerned with how the organization organizes for IT, including IS/IT strategy development, delivery of IT benefits, structure for service delivery, mechanisms for business and IT organization to come together. The structural dimensions deal with the IS functions with the enterprise.
3. *Service quality:* The service quality recognizes that the provision of some IT services will be based around a customer-supplier relationship. This might entail meeting predefined or expected criteria and service levels, some of which may be enshrined in formal service level agreements. The service quality refers to the way that an organization provides products or services which impacts the degree of satisfaction to its customers. It is the

customer's perception of the organization's performance that determines its success.

4. *Values and beliefs*: The values and beliefs of organizational members have a tremendous impact on many dimensions of IT in organizations, including how it is managed. For example, if business managers do not believe that IT is a strategic this is likely to define how they manage and deal with IT and associated issues. The final dimension to the framework is concerned with the values and beliefs of the organizational incumbents (the official who holds an office). Values and beliefs can significantly shape how attitudes develop and hence behavior and practices. These beliefs are shaped through ones career based on the experiences which one has with IT. Previous experience both with IT and within the industry or the organization is likely to have a major influence. Individual values and beliefs are indeed a powerful force and should not be underestimated. For instance, if business managers do not believe that IT is strategic this will reflect in how they manage and deal with IT and IT issues.

One of the recent researches was done based on this model research named "*DIAGNOSING THE GAP IN IT - BUSINESS STRATEGIC ALIGNMENT: A QUALITATIVE ANALYSIS AMONG PUBLIC SHAREHOLDING FIRMS IN JORDAN*" (Majali and Dahlin, 2010) this research done in 2010, this research was based on In-depth qualitative interviews with IT managers in Jordanian organizations to investigate and understand why Many organizations in Jordan are currently frustrated with the benefit and value obtained from their investment in IT. The conclusion of this research was *"leadership, structure and process, service quality and values and belief are the most important factors which are representative of the culture gap between IT strategy and business strategy. The lack of*

these factors hinders organizations from gaining benefits from their investment in IT. From the findings of this study, it is found that the alignment gap is often used to explain or justify an organization's inability to effectively leverage on IT."

According to (Shamekh, 2008) Hence we can conclude that the concept of the alignment gap in general, viewed from a Managerial perspective, refers to the state of unmanageability to create a strategic harmony and balance between the business demands and the resources of the business in an enterprise. Viewing the issue from the IS/IT in relation to business management in particular, the alignment gap refers to the degree of incongruence between the business management and the IT organization which is a reflection of disharmonious relationship that is substantially high or low between business strategy and IT strategy that will harm the gain of strategic advantage. Therefore, the greater disharmony is detected, the greater gap is perceived.

2.8. Business performance

Business performance is a complex, multi-faceted concept (Xiaoying et al., 2008). Firstly, what do we really mean by 'performance? There are hundreds of answers to this. You could, for example, measure sales, market share, profit, value added, return on investment, output, productivity, quality, unit cost, customer loyalty, staff morale and so on (Waters, 1999).

Business Performance defined as the measures of growth and profitability of the firm through its business endeavors and deployment of organizational and technological resources (Shamekh, 2008). Furthermore,

“performance measurement” defines as the process of quantifying the efficiency and effectiveness of past action. Instead, a “performance measurement and management” system, it is a widely system, which has the role of collecting, integrating and analyzing performance measures for enhancing decision making processes, verifying strategies and creating alignment. Moreover, performance measurement is the language of progress for the organization. It indicates where the organization is and where it is heading. It functions as a guide to whether the organization is en route to achieving its goals. It is also a powerful behavioral tool, since it communicates to the employee, what is important and what matters for the achievement of the organization’s goal (Taticchi, 2010).

In this research the researcher used (Venkatraman, 1989) two dimensions of business performance: market growth and profitability. Market growth means market share gains related to competition and profitability stands for financial conditions relative to competition.

2.9. IT/IS and Alignment in Palestine

IT sector plays a vital role in the Palestinian economy. It grows in a rapid pace ranging from 25 - 30 % till year 2000. In the last decade, an immense development was shown in the telecommunication sector specially after the Palestinian telecommunication sector was 100% privatized with the creation of PALTEL, the Palestine Telecommunications Company, which installed a digital network connecting the West Bank and Gaza and currently offers a wide range of services such as standard fixed telephone lines, leased lines, ISDN connections, ADSL. Which increase the

importance of IT and the needs of it. In percentage 46% growth in the number of ICT firms in last 3 years .The other factor made this vital role of the IT sector was the Accelerated development of software industry which produce software for different companies and departments such as human resource managements, projects and sales managements, finance and accounting, management information systems. Furthermore, recently many companies was established and specialized in the web developments and e-business solutions. There are More than 150 active private companies in the IT sector.

also there are More than 4500 workers is in the sector (Telecom and IT) .The other factor which pushed the IT to developed is the large scale of end-user of technology products and services, this big organizations have big needs to meet which enforces IT to develop to handle this needs and to improve it. Moreover, the basic qualification of development is qualified human resource which is shaped by, hundreds of University graduates also help IT to develop. Despite all this, the important factor that helps IT to develop in Palestine, is the Palestinians and foreign investments and the support of information and communication technology (ICT) ministry. Recently, 25% annual growth in local IT market, currently estimated at more than US$ 300 million (Ministry of Telecom & Information Technology, 2012, PITA, 2012).

From general interview with CEO’s and CIO’s , it was obvious that most of Palestinian organizations believe that IT is playing key role and directly impacts the company’s overall performance and it’s improvements.

In addition, they said that the alignment between IT strategy and the business strategy should create a significant progress of the overall organizations performance.

2.10. Related studies

The business and IT performance implications of alignment have been demonstrated empirically and through case studies during the last decades. Simply put, the findings support the hypothesis that those organizations that successfully align their business strategy with their IT strategy will outperform those that do not. Alignment leads to more focused and strategic use of IT which, in turn, leads to increased performance (Chan and Reich, 2007).

The following tables explore the summery of some International Studies that's written about alignment.

Table 2-2(a): International Studies of Business strategy and IS/IT Alignment

Study	Study Title	Result
Henderson and Venkatraman (1993)	Strategic alignment: Leveraging information technology for transforming organizations	The fit of main 4 aspects namely business strategy, organizational infrastructure, IT strategy and IT infrastructure improves the business performance.
Bergeron and Raymond (1995)	The contribution of IT to the bottom line: a contingency perspective of strategic dimensions	Strategic IT management business strategy alignment has a positive influence on organizational performance.
Teo and King (1996)	Assessing the Impact of Integrating Business Planning and IS Planning. Information & Management	IT strategy-business strategy alignment has a positive influence on organizational performance.

Source: International Journals, (Jamporazmey et al., 2011)

Table 2-2(b): International Studies of Business strategy and IS/IT Alignment

Study	Study Title	Result
Chan et al., (1997)	business strategic orientation, information system strategic orientation, and strategic alignment	Conformity of IT strategies and business strategies are better criteria for business performance rather than strategic approach on its own.
Palmer and Markus (2000)	The performance impacts of quick response and strategic alignment in specialty retailing	There is no relation between IT strategies and business alignment with organization performance.
Sabherwal and Chan (2001)	Alignment between business and IS Strategies, a study of prospectors analyzers and defenders [Profile deviation]	IT-business alignment influences the business performance, that provide futurity and analysis strategies which in defensive organization are meaningless.
Croteau et al ., (2001)	Organizational and technological infrastructures alignment	IT infrastructure-organizational infrastructure alignment influences the business performance positively.
Bergeron and Raymond (2001)	Fit in strategic information technology management research: an empirical comparison of perspectives	Business strategy-IT strategy alignment and IT structure-organization structure alignment increased the performance.
Cragg et al., (2002)	IT alignment and firm performance in small manufacturing firms	IT-business alignment had positive effect on business performance.
Bergeron and Raymond (2004)	Ideal patterns of strategic alignment and business performance	Contradictory gestalt s of business strategies, IT strategies, IT structures and organization structure alignment were found in organizations that had a low performance.

Source: International Journals, (Jamporazmey et al., 2011)

Table 2-2(c): International Studies of Business strategy and IS/IT Alignment

Study	Study Title	Result
Cragg et al., (2007)	Evaluating the Alignment of IT with Business Processes in SMEs.	Business process-IT process alignment results in the success of IT projects
Tarigan (2005)	An Evaluation of the Relationship between Alignment of Strategic Priorities and Manufacturing Performance	Alignment effect on performance is strengthen by high level of decentralization. Moreover, from a managerial perspective it is important to know that alignment pays off under certain conditions. Under certain levels of decentralization, formalization, and the use of team, the alignment will enhances performance.
Jamporazmey et al ., (2001)	Productivity Paradox Challenge: Impact of Information Technology (IT)-Business Alignment on Business Performance in Iranian IT-Based Firms	Firms that have alignment between their business strategy, IT strategy and IT structure have improved and enhanced performance.
Bardhan et al., (2007)	Project Performance and the Enabling Role of Information Technology: An Exploratory Study on the Role of alignment	alignment between IT usage and project characteristics was associated with improvements in project competencies, as wellas project performance, measured in terms of project cycle time, cost, quality, and on-time completion.

Source: International Journals, (Jamporazmey et al., 2011)

Table 2-2(d): International Studies of Business strategy and IS/IT Alignment

Study	**Study Title**	**Result**
Iman and Hartono (2007)	strategic alignment impacts on organizational performance in Indonesian banking industry	The final, and the most important, point is that executives in the information technology/systems realm should share responsibility with senior executives in other fields, because strategic alignment has been proven to improve the organizational performance.
Iselin et al., (2008)	The effects of the balanced scorecard on performance The impact of the alignment of the strategic goals and performance reporting	The strength of the alignment of the strategic goals and the performance reporting measures was positively related to ten of the 13 organizational performance dimensions (76.9%).
Tallon and Pinsonneault (2011)	competing perspectives on the link between strategic information technology alignment and organizational agility: insights from a mediation model	Alignment could become a key part of how firms strategize for and justify agility as part of an attempt to protect and, longer term, to improve their performance.

Source: International Journals, (Jamporazmey et al., 2011)

Chapter Three

RESEARCH METHODOLOGY

Chapter Three

Research Methodology

3. Research Methodology

3.1.Introduction

The aim of this chapter is to present the research methods used in this research. In this chapter the researcher explore the research population and sample, research approach, Quality Standards for the Research Tool and Distribution of the Questionnaire.

Methodology is the style or method researchers follow in conducting their research. Often researchers select the research methodology according to the nature of the research itself. Each research has its properties and uniqueness (Alhamdani et. al. 2006).

3.2.Research Population

Population is "the whole groups of individuals, phenomenon, or things that we aim to generalize our study's results on" (Alhamdani et. al., 2006). The population is all the Palestinians firms that are listed in the Palestine exchange. Which consist of 46 firms, distributed in different sectors: banking and financial services, insurance, investment, services and manufacturing.

3.3.Research Sample

Research sample consist of all research population which consist of 46 Palestinians firms that listed in the Palestine exchange. The following table display the sample classified by firm type:

Table 3-1: Research Sample classified by firm type

Firm Business Type	Number of firms	Percentage
Banking & financial services	8	17%
Insurance	7	15%
Investment	8	17%
Services.	12	26%
Manufacturing	11	24%
Total	46	100%

Sample classified by capital:

Table 3-2: Research Sample classified by firm capital

Capital in Millions ($)	Firms Count
1 - 50	37
50 - 100	5
100 - 150	1
> 150	3

3.4.Research Tool

Researchers follow qualitative approach, quantitative approach, or both of them to understand and explain a specific phenomenon. Researchers depend on the research purpose, the nature of the research, the

problem area, and research questions to determine the appropriate approach (Alhamdani et. al. 2006).

The descriptive method of research was used for this research, in order to achieve the research objectives. Three main methodologies have been used for data collection, first, review of relevant literature: performing literature review, including electronic and desk research, and review and examination of the available studies, articles and books. Second, questionnaire to get quantified results to answer the research questions. Third, Interviews: with chief executive officers (CEO's) and chief information officers (CIO)'s and consultants to understand and analyze the results.

3.4.1. Quantitative Approach

Quantitative methods examine the effects of specified circumstances (independent variable) on an outcome of interest (dependent variable) in ways that can be expressed numerically (Lakshman, 2000). According to (Creswell, 2003) Quantitative approach objective "is to test hypotheses that the researcher generates". Quantitative approach depends on numerical data and statistics to describe the phenomenon and explore the correlations between its variables. In this case, results are expressed in quantitative terms and can be represented in figures (Khan, 2009).

The researcher used the Quantitative questionnaires because it's best way to gather numerical data that could be used to confirm hypotheses.

Questionnaire is a simple and rapid tool for collecting data in reasonable time with reasonable effort. By using this tool hundreds even thousands of individuals can participate (Khan, 2009).

This research is based upon previous research called "*Alignment Between Business and IS Strategies: A Study of Prospectors, Analyzers, and Defenders*" (Sabherwal and Chan, 2001). The same questionnaire was used which consists of the following parts:

1. ***Questionnaire cover***, which divided in two parts: purpose of the questionnaire and letter of gratitude to participants with promises use the information just in the research for study purposes.

2. ***Business strategy section,*** which consist of:

Table 3-3: Business strategy variable

Business strategy variable	Number of questions
Defensiveness	4
Analysis	3
Risk Aversion	3
Proactiveness	3
Futurity	2
Aggressiveness	3

To measure these questions researcher chose five point Likert scales. "1" strongly disagrees, "2" disagree, "3" neutral, "4" agree, "5" strongly agree.

3. ***Information system strategy section***, which consist of:

Table 3-4: IS strategy variable

IS strategy variable	Number of questions
Operational Support System	6
Interorganizational System	4
Market Information System	4
Strategic Decision Support System	3

To measure these questions researcher chose five point likert scale. "1" strongly disagrees, "2" disagree, "3" neutral, "4" agree, "5" strongly agree.

4. ***Performance section***, which consist of:

The original questionnaire measures eight business performance attributes, if the same attributes are used to measure the business performance, the questionnaire will be very tall, so the researcher depend on (Venkatraman, 1989) two dimensions of business performance: market growth and profitability, the questions of these attributes taken from ***(Schniederjans and Cao , 2008)***.

Table 3-5: Performance variable

Performance variable	Number of questions
Growth	3
Profitability	5

To measure these questions five point likert scales was chosen by the researcher. "1" more than worse, "2" worse, "3" equivalent, "4" better, "5" more than better. In comparison with competitors at the last three years.

After that, the questionnaire was translated it into Arabic Language, because it's the mother language in Palestine. The translation process reviewed by experts in strategy and expert in technology to make sure that the meaning of the statements in Arabic corresponds to the meaning in English.

The questionnaire now is ready for distribution; the current phase now is to get all firms' addresses and determine contact persons as possible as to facilitate questionnaire distribution process. Two prime methods were used in questionnaire distribution: first, delivering the questionnaire by hand. The other, sending questionnaires by email. Almost all firms were covered by the first method. All research sample was covered.

190 questionnaires were printed for distributing to each firm in the research sample. Some of firms refuse receiving questionnaires, due to firm rules that prevent fill any questionnaire. Some of firms receive questionnaires and promise to fill but there are no returned questionnaires. 135 questionnaires were distributed by hand and by email, 94 questionnaires were returned from 27 firms. The number of valid questionnaires was 88. The following table shows the all details about Data Collection.

Table 3-6: Distribution and Collection of Data

Firm Type	No. of Firms	No. of Questio n-nnaires	Questio n-nnaires Received	Valid Questio n-nnaires	Respons e Rate
Banking & financial services	6	30	24	23	77%
Insurance	6	30	23	23	77%
Investment	2	10	7	4	40%
Services	7	35	21	19	54%
Manufacturing	6	30	19	19	63%
Total	**27**	**135**	**94**	**88**	**46%**

From the above table, it is obvious that the response rate in Banking & financial services is 77% , in the Insurance is 77%, investment 40%, Services is 54% and Manufacturing is 63%, The overall response rate is 46%.

3.4.2. Qualitative Approach

Qualitative methods inquiry applies to situations where relevant variables producing an outcome are not apparent or where the number of subjects or outcomes under study are insufficient for statistical analysis (Lakshman, 2000). Furthermore, Qualitative approach Objective "is to discover and encapsulate meanings once the researcher becomes immersed

in the data". Qualitative approach seeks to understand the research problem from the local population. Researchers often try to get specific information about the phenomenon, variables, and values by exploring opinions, behaviors, and perceptions of a particular population. So, this approach gives information and descriptions about thoughts and experiences of people (FHI, 2005).

The researcher used the interviews because it's probably the most widely employed method in qualitative research. Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaires, e.g., to further investigate their responses (McNamara, 1999).

Many interviews were made with many CIO's and CEO's and consultants to discuss the results and the finding with them. Researcher prepared an interview questions to ask them (interviews questions in appendix B), these questions are divided in two groups first, questions related to strategy, the second, questions related to alignment. The results of these interviews are discussed in chapter 5.

Table 3-7: Comparison of quantitative and qualitative research approaches

	Quantitative	Qualitative
General framework	Seek to confirm hypotheses about phenomena.	Seek to explore phenomena
	Instruments use more rigid style of eliciting and categorizing responses to questions.	Instruments use more flexible, iterative style of eliciting and categorizing responses to questions
	Use highly structured methods such as questionnaires, surveys, and structured observation	Use semi-structured methods such as in-depth interviews, focu groups, and participant observation
Analytical objectives	To quantify variation	To describe variation
	To predict causal relationships	To describe and explain relationships
	To describe characteristics of a Population	To describe individual experiences
		To describe group norms
Question format	Closed-ended	Open-ended
Data format	Numerical (obtained by assigning numerical values to responses)	Textual (obtained from audiotapes, videotapes, and fiel notes)
Flexibility in study design	Study design is stable from beginning to end	Some aspects of the study are flexible (for example, the addition, exclusion, or wording o particular interview questions)
	Participant responses do not influence or determine how and which questions researchers ask next	Participant responses affect how and which questions researchers ask next
	Study design is subject to statistical assumptions and conditions	Study design is iterative, that is, data collection and research questions are adjusted accordin to what is learned

Source: Mack et al., 2005

3.5. Quality Standards for Research Tool

Several procedures were performed to test the questionnaire.

3.5.1. Pilot Study

Pilot study may be the most important step in preventing wasted effort. More specifically, Pilot study is a test study that is most often performed before collecting the data. It aims to refine and improve the questionnaire. In this case, participants can understand the questions without facing any problems, and give their answers clearly. Pilot study also helps researchers to record their data easily, and reduce the possibility of getting incomplete answers. Research tool was reviewed by group of experts and arbitrators (listed in appendix C), starting with my supervisor, experts in the Strategy, experts in Information technologies and Information systems. Experts and arbitrators made comments on the translation, to accurate that the translation has the same questions meanings.

Questionnaire was refined, and then two firms were chosen to review the questionnaire with them to make sure that the questions are clear and meaningful. The Participants made comments on the terms that used after the translation. Some modification was added to the questionnaire before achieve the final version. The participants and Firms in pilot study are excluding from the research sample and the final analysis.

All these comments from experts, arbitrators, and participants were discussed with my supervisor, and then adjustments were made.

Questionnaire was refined and became ready for distribution. The next step before the distribution process is test the reliability and validity of the questionnaire.

3.5.2. Reliability and Validity

All research must have "truth value", "applicability", "consistency", and "neutrality" in order to be considered worthwhile, the nature of knowledge within the rationalistic (or quantitative) paradigm is different from the knowledge in naturalistic (qualitative) paradigm (Morse et al., 2002). Consequently, to make sure that the measures were used are consistent, we should check both the research reliability and validity

3.5.2.1. Reliability

The term ‘Reliability’ is a concept used for testing or evaluating quantitative research, the idea is most often used in all kinds of research. If we see the idea of testing as a way of information elicitation then the most important test of any qualitative study is its quality. A good qualitative study can help us “understand a situation that would otherwise be enigmatic or confusing” (Golafshani, 2003). To measure questionnaire reliability the Cronbach’s alpha was calculated for all statements in the questionnaire as the following:

Table 3-8: Reliability Statistics of Research variables

Business strategy variables	**Cronbach's Alpha**
Defensiveness	0.744
Analysis	0.702
Risk Aversion	0.667
Proactiveness	0.731
Futurity	0.657
Aggressiveness	0.675
IS strategy variable	**Cronbach's Alpha**
Operational Support System	0.847
Interorganizational System	0.857
Market Information System	0.784
Strategic Decision Support System	0.897
Performance variable	**Cronbach's Alpha**
Growth	0.920
Profitability	0.916

Almost of the questionnaire variables are above 70%, as well as the total reliability of the questionnaire is (0.949). Therefore, the research tool is reliable.

3.5.2.2. Validity

Validity measures what the research tool is measure; it ensures that the research tool is measuring what researchers attend to measure or want to measure (Polit and Hunger, 1985).

For achieving the research tool validity, many issues were made: first of all, this research depend on previous research named "*Alignment Between Business and IS Strategies: A Study of Prospectors, Analyzers, and Defenders*" (Sabherwal and Chan, 2001). Which according to ACM portal it cited by 68 researches, this research used the same questionnaire that used in that research where the reliability and validity were tested. Moreover, Arbitrators and experts in Information system and information technology who confirmed the research tool that achieve the research purpose. Furthermore, a pilot study was done with CEO and CIO to ensure that research tool can achieve the research purpose. Additionally, reliability was checked and the results showed the questionnaire consistency is relevant.

3.6. Conclusion

To suit the research problem and research questions, researcher used both qualitative and quantitative approaches. Researcher used exploratory interviews to explore and understand the Alignment phenomenon and to ensure that our result's reflecting the facts in Palestinian firms; researcher used flexible questions to achieve this purpose. Qualitative approach is used in this area.

This research aims to study the impact of IS/IT strategy and business strategy alignment on business performance. Thus; researcher used a questionnaire distributed to all population to measure the impact, and to examine research hypotheses. Quantitative approach is used in this area.

This chapter has given an overview on the research methodology and highlights the importance of quantitative and qualitative technique in this research. Moreover, it discussed the quality standards for research tool and the procedures of the data gathering.

Chapter Four

FINDINGS AND RESULTS

Chapter Four

Findings and Results

4. Findings and Results

4.1. Introduction

This chapter presents the data analysis approach and the results of analysis of data that is collected via the questionnaire using Special developed software. This chapter will show the results of descriptive statistics and the results of the hypotheses testing in order to determine if there is an impact of business strategy and IS/IT strategy alignment on the business strategy in the Palestinian firms. As mentioned before this research is based upon pervious research named "*Alignment Between Business and IS Strategies: A Study of Prospectors, Analyzers, and Defenders*". The same way of the calculation that used in that research was followed because this method which belongs to (Sabherwal and Chan, 2001) is popular method of calculating the alignment between business strategy and information system strategy, which depends on the Euclidian distance between each firm's business strategy and the three ideal business strategy profiles (Defenders, Prospectors and Analyzers), this way of calculation was adopted by previous research like (Xiaoying et al., 2008).

4.2. Research model

According to (Sabherwal and Chan, 2001) there are different IS strategies would be appropriate for the three business strategies, each

business strategy is associated with different kinds of information systems; Moreover, from literature and the discussions of each business strategy identify several aspects related to IS strategy, such as the Defenders' emphasis on cost containment, the Prospectors' desire for flexibility and innovation, and the Analyzers' endeavors to simultaneously achieve efficiency and innovation.

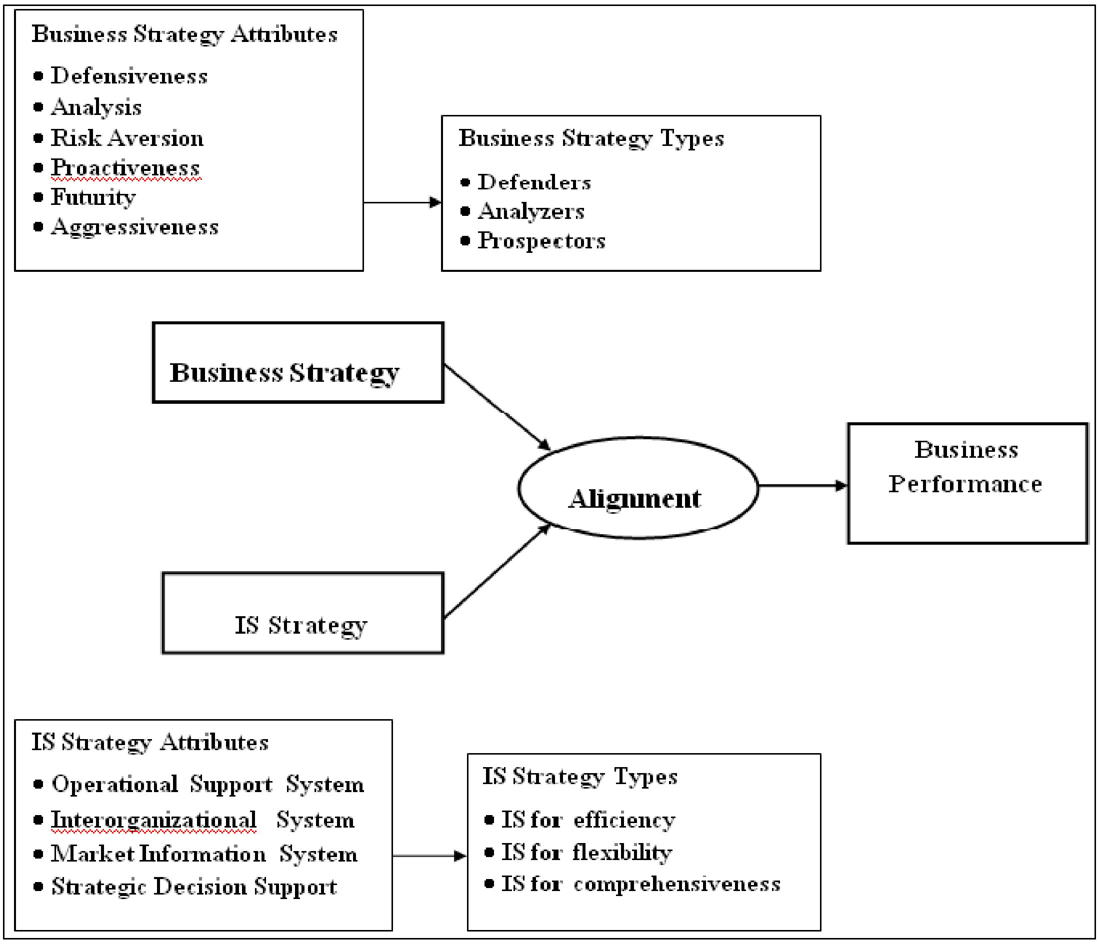


Figure 4-1 (Sabherwal and Chan, 2001): Research Model.

The Defender, Analyzer, and Prospector business strategy types are examined using six business strategy attributes-defensiveness, risk aversion, aggressiveness, proactiveness, analysis, and futurity. In contrast, IS strategy attributes are mapped to IS strategy types in a similar manner.

The IS strategy best aligned with each business strategy is examined in terms of four IS strategy attributes (operational support systems, market information systems, strategic decision support systems and interorganizational information systems), first three attributes reflect the traditional classification of information systems into transaction-processing systems, management information systems, and decision support systems, respectively. The fourth may be considered a distinct type. Together, these four IS strategy attributes, focusing on the actual business support provided by the systems, reflect three types of IS strategies corresponding to the Defender, Analyzer, and Prospector business strategies. As discussed later, "IS for efficiency," "IS for flexibility," and "IS for comprehensiveness" IS strategy types are believed to be best aligned with Defender, Prospector, and Analyzer business strategies, respectively (Sabherwal and Chan, 2001).

Alignment, then, is examined between the three business strategy types and the three IS strategy types. Organizations with greater alignment between business strategy and IS strategy are also more likely to utilize IS for a competitive advantage.

4.3. Business strategy and Information system profiles

4.3.1. Business strategy (Defender, Analyzer, Prospector) profiles

According to Miles and Snow (Xiaoying et al., 2008) in their popular strategy classification typology they identified three viable business strategies: Defenders, Prospectors, and Analyzers. The Defender is an organization with a conservative competitive strategy and engages in little

or no new product development (Xiaoying et al., 2008). Furthermore, it is the most stable of the three, It seals off a stable and predictable but narrow niche in its industry by offering high-quality (but standard) products or services at low prices. Stressing operational efficiency and economies of scale, it has greater fixed-asset intensity than the other strategic types, with investments in highly cost efficient but few core technologies. However, the Defender does not tend to search outside its domain for new opportunities, and rarely makes major adjustments in its structure or technology (Sabherwal and Chan, 2001).

A prospector is an organization with an aggressive competitive strategy that attempts to pioneer in the product/market development (Xiaoying et al., 2008). Moreover, The Prospector is very different. It continuously seeks new product/market opportunities, and is the creator of change in its market. Emphasizing innovativeness. To function in a broad and dynamic domain, it seeks flexibility in technology However, the concern with flexibility and innovativeness often leads to a lack of controls and low operational efficiency (Sabherwal and Chan, 2001).

An analyzer, as an intermediate type, is an organization with a moderate competitive strategy that makes fewer and slower product/market changes than a prospector and is less stable than a defender (Xiaoying et al., 2008). Indeed, the analyzer combining the strengths of the other two types, it seeks to simultaneously minimize risk while maximizing opportunities for growth. It does not usually initiate new products but often follows the Prospector by very quickly introducing competitive, and occasionally

better, products. Thus, unlike the Defender, it does not eschew change, but unlike the Prospector, it does not create change. To address conflicting demands of efficiency and innovation, the Analyzer uses a dual technological core, with stable and flexible components (Sabherwal and Chan, 2001).

By using three-point scale of high, medium, and low. Table 4-1 provides the business strategy profiles for the three strategic types:

Table 4-1: business strategy profiles of Defenders, Prospectors, and Analyzer

Business strategy attributes	Defenders	Prospectors	Analyzers
Defensiveness	High	Low	Medium
Risk Aversion	High	Low	High
Aggressiveness	Medium	High	Medium
Proactiveness	Low	High	Medium
Analysis	Medium	Medium	High
Futurity	High	Medium	Medium

According to (Sabherwal and Chan, 2001) we can conclude that defender is represented by Defensiveness, and prospector is represented by Proactiveness. Defenders rank high on defensiveness low on proactiveness whilst, Prospectors rank high on proactiveness and low on defensiveness. In contrast, Analyzers are medium in both aspects. On the other hand, Risk Aversion means level of risk. The scores for the level of risk were, Defenders is high, because the Defender plays it safe by operating in a

narrow stable domain, whereas Analyzers scored highly risk averse; it looks for opportunities to grow, but it only adds new products/services that another organization (a Prospector) has already shown to work successfully. In contrast Prospectors scored low, because the Prospector frequently takes risks with. Analysis, representing "the organization's overall problem-solving behavior, including the tendency to search deeper for the roots of problems and to generate the best possible solution alternatives", It included two kinds of analysis internal and external. The Analyzer found to be high in both. On the other hand, Prospectors and Defenders ranked as high on one aspect of analysis but not on the other; therefore, both of these configurations are considered as medium in analysis. Futurity or future-orientation, reflecting "the relative emphasis of effectiveness (long-term) considerations versus efficiency (shorter-term) considerations" . Defenders, Prospectors, and Analyzers considered as high, medium, and medium, respectively. Rating Prospectors as medium in futurity because, "(the Prospectors) achieve success by being first, either by anticipating where the market is going or by shaping the market's direction through their own research and development efforts". Aggressiveness, reflect the organization's efforts toward "improving market rates at a relatively faster rate than the competitors in its chosen market". Defenders, Prospectors, and Analyzers considered as medium, high and medium, respectively.

4.3.2. Information system (Defender, Analyzer, Prospector) profiles

By using three-point scale of high, medium, and low. Table 4-2 provides the IS strategy profiles for the three strategic types:

Table 4-2: IS strategy profiles of Defenders, Prospectors, and Analyzer

	Defenders	Prospectors	Analyzers
IS strategy attributes	**IS for efficiency**	**IS for flexibility**	**IS for comprehen-siveness**
Operational Support System	High	Low	Medium
Market Information System	Low	High	High
Interorganizational System	High	Medium	High
Strategic Decision Support System	High	High	High

According to (Sabherwal and Chan, 2001) we can conclude that operational support systems represent the use of IS for monitoring and controlling the day-to-day operations. Increased use of IS for operational support would generally be expected to facilitate operational efficiency. The rating of the importance of operational efficiency was high, medium, and low for Defenders, Analyzers, and Prospectors, respectively. Prospector rated as low because, "administrative system may, at least temporarily, underutilize and misutilize resources". In contrast, "(the Defender's) administrative system is ideally suited for generating and

maintaining efficiency". Defenders may be expected to encounter slower changes in the nature of their transactions and, consequently, operational support systems may be expected to play a greater role than in Prospectors, which frequently enter new business domains and therefore undergo more regular changes in their basic business transactions. Market information systems are related to management information systems but with a greater focus on the company's markets and product sales. It has been argued, and empirically found, that Prospectors more closely monitor their product/market trends and have greater marketing expenditures than Defenders. "The Prospector's administrative system is well suited to maintain flexibility". Analyzers also rank high in terms of the use of market information systems. They observe the market avidly and respond very quickly to market changes. Strategic decision support systems play a major role in all three configurations. In Defenders, these systems contribute to the long-term planning, or futurity, which is a key characteristic of that configuration. In Prospectors, they contribute to proactiveness by helping the organization to make strategic decisions quickly and effectively. Finally, in Analyzers, these systems contribute to the high levels of internal and external analysis performed by the organization. Because of the greater stability in their customers and suppliers, Defenders and Analyzers would derive greater benefits from interorganizational systems than Prospectors. Defenders probably anticipate few changes in their domains. Whilst, Prospectors would also be expected to make less use of structured interorganizational systems because of their lack of formalization. In

contrast, Analyzers would make greater use of interorganizational systems because of their relatively greater stability and formalization. Also, interorganizational systems would provide Analyzers sales related information that would facilitate the often complex coordination between their marketing and production functions.

To summarize, for Defenders, an "IS for efficiency" strategy oriented toward internal and interorganizational efficiencies and long-term decision making. For Prospectors, an "IS for flexibility" strategy focusing on market flexibility and quick strategic decisions . Finally, an "IS for comprehensiveness" strategy enabling comprehensive decisions and quick responses through knowledge of other organizations-would fit Analyzers. This alignment of the three IS strategies with the three business strategies is shown in Table 4-3 (Sabherwal and Chan, 2001).

Table 4-3: levels of alignment between various business and IS strategies

	Defenders	**Prospectors**	**Analyzers**
IS for efficiency	High	Low	Low
IS for flexibility	Low	High	Low
IS for comprehensiveness	Low	Low	High

4.4. DATA Analysis Approach

Before start data analysis, the means and standard deviations of all the research variables are calculated and showed in Table 4-4.

Table 4-4: Research Variables

	No. of Items	Mean	SD
Business Strategy Attributes			
Defensiveness	4	4.34	0.84
Analysis	3	4.16	0.87
Risk Aversion	3	3.80	0.92
Proactiveness	3	3.58	0.99
Futurity	3	3.88	0.97
Aggressiveness	2	3.21	1.12
IS Strategy Attributes			
Operational Support System	6	3.97	0.77
Interorganizational System	4	3.71	0.95
Market Information System	4	3.48	1.02
Strategic Decision Support System	3	3.75	0.91
Business Performance	8	3.37	0.89

All research variables are measured on a five-point scale

Four broad steps were involved in the data-analysis process: (1) normalization of research variables within each industry in each survey; (2) classification of all respondent companies into Defenders, Prospectors, and Analyzers; (3) computation of alignment between business strategy and IS

strategy; and (4) testing of the four research hypotheses. These steps and the specific tasks within each step, are summarized in figure 4-2 and discussed below (Sabherwal and Chan, 2001).

Step1. Normalization. First of all firms was grouped by industry, this produced a total of five subsamples, after that the means and standard deviations were calculated for each subsample, of all the research variables (These included measures of business strategy, IS strategy, and organizational performance). The subsamples were then recombined, and the standardized scores were used for the remaining data analyses.

Step2. Classification into Defenders, Prospectors, and Analyzers. This step aims to classify the respondent companies into the three business strategy types, based on the proximity of each company's business strategy attributes to the ideal profiles for Defenders, Prospectors, and Analyzers. Three tasks were performed in this step.

First, for each business strategy type (for Defenders, Prospectors, and Analyzers) the business strategy profile was identified (in terms of the six business strategy attributes) depending on the theoretical profiles of the three strategy types which discussed earlier and summarized in Table 4-1. high and low values for the ideal business strategy values were operationalized as + 1 and -1, respectively. A medium ideal value was operationalized as a normalized score of zero.

Second, the Euclidian distance between each firm's business strategy and the three ideal business strategy profiles (Defenders,

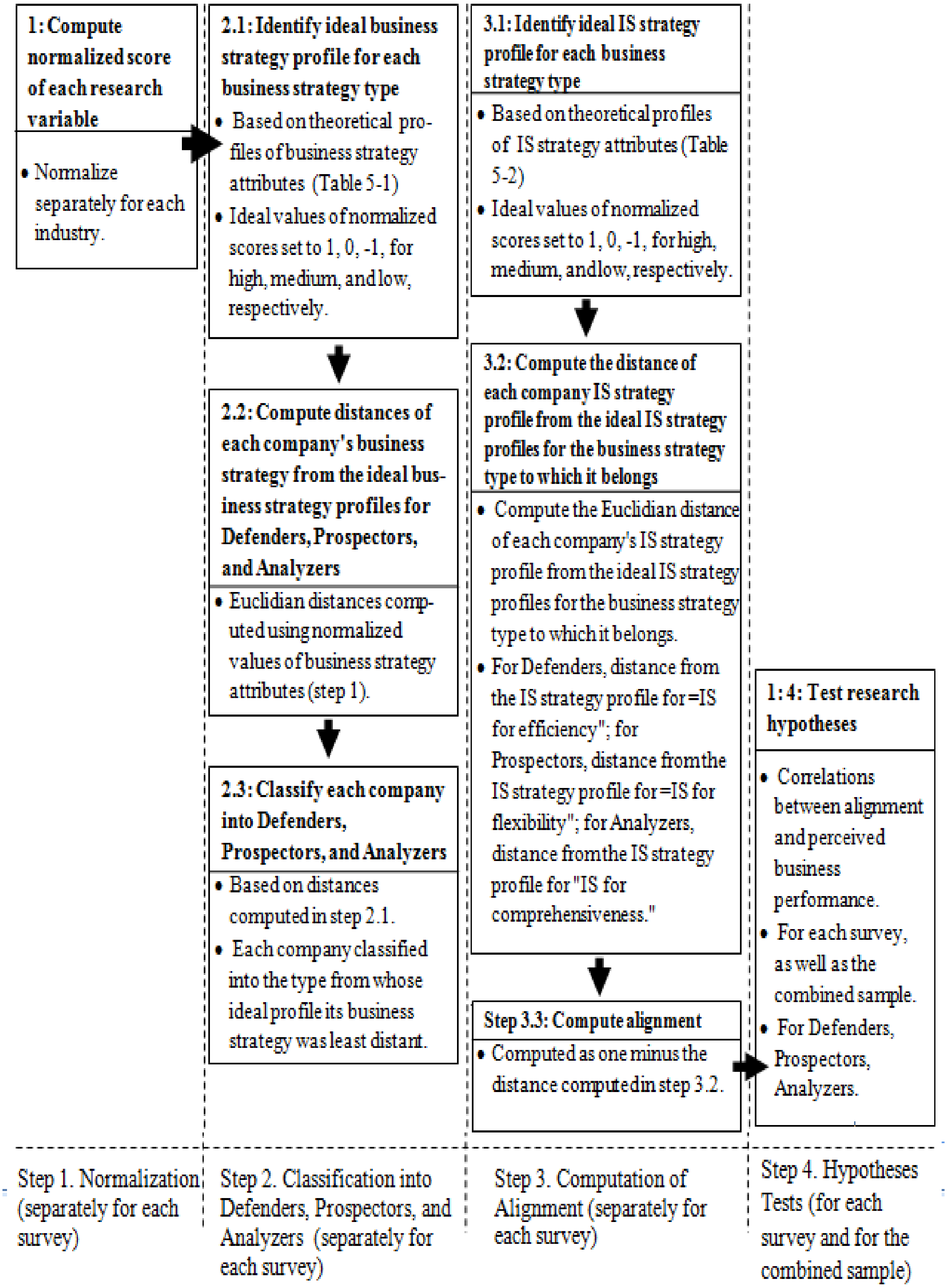


figure 4-2 (Sabherwal and Chan, 2001): The analytical approach.

Prospectors and Analyzers) were computed similarly. For example the distance from Defenders was computed as follows:

$$\textbf{Distance (Defenders)} = \sqrt{\sum \{(X_j - I_{j,DFF})^2\}}, \qquad (1)$$

where X*j* = the normalized score for the *j*th business strategy attribute, I*j*,DFF = the ideal normalized score of the *j*th business strategy attribute for Defenders, the SIGMA is across the various values of j, and j ranges from 1 to 6 for the six business strategy attributes. This process produced three distance measures for each company, indicating its distances from the ideal profiles for Defenders, Prospectors, and Analyzers.

Third, from previous each company classified into one of the three business strategy types by examining which of the three distances for that company was the lowest, as that indicates the ideal business strategy most closely resembling the company's business strategy.

Step3. Computation of Alignment Between Each Company's Business Strategy and Its Group's Ideal IS Strategy. Three tasks were involved in this step. First, for each IS strategy type (IS for efficiency, IS for flexibility and IS for comprehensiveness) the IS strategy profile was identified (in terms of the four IS strategy attributes) depending on the theoretical profiles of the three IS strategy types which discussed earlier and summarized in Table 4-2. Again, ideal values of high, medium, and low were operationalized as 1, 0, and - 1, respectively.

Second, by using Equation (1) the Euclidian distance between each firm's IS strategy and the ideal IS strategy for the business strategy type

was computed, although the four IS strategy attributes (and the corresponding ideal values) were used, instead of the six business strategy attributes.

Third, alignment was computed by subtracting the above distance from 1. Smaller Euclidean distance indicates that the IS strategy is closer to the ideal profile and that the degree of alignment is higher. Therefore, subtracting the distance measure from 1 helped convert it into a measure of alignment.

4.5.Hypotheses Testing & RESULTS

Now the business performance and alignment values are calculated, so all research hypotheses can now examine by using a correlation coefficient test between these two variables.

Hypotheses one was tested by examining the correlation between all business performance and alignment values (across the three strategies), Hypotheses 2, 3, and 4 were tested using the correlations between perceived business performance and alignment within the corresponding set of companies (Defenders, Prospectors, or Analyzers).

21 firms were founded to be closest to the ideal profile of analyzer, 3 firms were closest to the ideal profile of defender, and the last 3 firms found closest to the ideal profile of prospector, results are summarized in table 4-5, and table 4-6.

Table 4-5: frequencies of the three business strategy types

Business Strategy Type	No. of Firms	Percentage
Defender	3	11%
Prospector	3	11%
Analyzer	21	78%
Total	27	100%

Table 4-6: frequencies of the three business strategy types within each industry

Firm Type	Defender	Prospector	Analyzer	Total
Banking & financial services	0	2	4	6
Insurance	0	0	6	6
Investment	0	0	2	2
Services	2	1	4	7
Manufacturing	1	0	5	6
Total	3	3	21	27

Table 4-7 summarizes the correlation coefficients between alignment and perceived business performance. Alignment was associated with perceived business performance in the research sample.

Table 4-7: Implication of Alignment for Organizational Performance

Business strategy type	Correlation Between Alignment and Perceived Business Performance	N	Conclusion
Whole Sample	0.27	27	support of Hypotheses 1
Defenders	0.09	3	support of Hypotheses 2
Prospectors	0.31	3	support of Hypotheses 3
Analyzers	0.17	21	support of Hypotheses 4

$*P \leq 0.05$

Hypothesis 1 examined by calculating the correlation coefficient between all business performance and alignment values regardless the business strategy type, as shown in table 4-7 the correlation coefficient value equal 0.27 that means there is a positive correlation between business strategy and IS/IT alignment and business performance, so this hypothesis is supported. Hypothesis 2, 3, 4 examined by calculating the correlation coefficient between all business performance and alignment values after classification the values by business strategy type. The results were:

- Hypothesis 2: the correlation coefficient value equals 0.09 that means, there is a positive correlation between business strategy and IS/IT alignment and business performance in the defenders, so this hypothesis is supported.
- Hypothesis 3: the correlation coefficient value equals 0.31 that means, there is a positive correlation between business strategy and IS/IT alignment and business performance in the Prospectors, so this hypothesis is supported.
- Hypothesis 4: the correlation coefficient value equals 0.17 that means, there is a positive correlation between business strategy and IS/IT alignment and business performance in the Analyzers business strategy type, so this hypothesis is supported.

Chapter Five

CONCLUSIONS AND RECOMMENDATIONS

Chapter Five

Discussion & Recommendations

5. Discussion & Recommendations

5.1. Summery

This thesis addressed the impact of business strategy and information technology strategy alignment on the business performance in the Palestinians firms. Furthermore, it highlights the importance of the alignment and how it considers as a hot topic. Furthermore, it identifies the alignment impacts on the business and the alignment challenges.

Thesis indicated a lot of business strategy, information technology strategy, information system strategy and alignment definitions. Moreover, it defines the Miles and Snows business strategy typology and identifies the suitable information system strategy profile for each business strategy type. In addition, define the way of calculation the business strategy type and how to calculate the alignments.

The alignment calculation done by: classification of all respondent companies into Defenders, Prospectors, and Analyzers depending On the Identified ideal business strategy and information system strategy profiles for each business strategy type, then compute the distance of each companies IS strategy profile from the ideal IS strategy profiles for the business strategy type to which it belongs.

After alignments were calculated, the performance calculated also, and the correlation coefficient between alignment and performance was calculated and the results will discuss below.

5.2. Discussion:

It appears clearly that the alignment between business strategy and IS/IT strategy have an impact on overall business performance in the Palestinians firms. The next table provide comparison between the previous research that we based on and this research

Table 5-1: comparison between the previous research and this research

	Previous research	**This research**
Research Methodology	Quantitative	Quantitative & Qualitative
Hypothesis Support	Not all Hypothesis supported	All Hypothesis were supported
Performance measure	Measures eight business performance attributes	Based on (Venkatraman, 1989) two dimensions of business performance
Sample Firm types	• Pharmaceutical manufacturing • Auto parts manufacturing • Insurance • Banks	• Banking & financial services • Insurance • Investment • Services • Manufacturing
Research surveys	Two separate surveys were administered with four-years time gap between the surveys	One surveys were administered without time gap.

5.2.1. Hypothesis Discussion

Results indicate that there is positive statistical relation between the alignment and the business performance in all Palestinians firms regardless of firm strategy type it was 27%. This percentage means that the alignment have 27% effectiveness from other factors that have an impact on the overall business performance.

The result of H.1 agree with the findings of the related studies (Sabherwal and Chan, 2001), (Jamporazmey et al., 2001), Bardhan et al., (2007), (Iman and Hartono, 2007), (Iselin et al., 2008), (Teo and King, 1996), (Bergeron and Raymond, 2001), (Cragg et al., 2002). And does not agree with (Xiaoying et al., 2008), (Palmer and Markus, 2000)

In addition, results show that there is a positive correlation between strategies alignment and business performance in defender business strategy type but this positive relation is very weak it was 1%. This percentage means that the alignment almost have no impact on the overall business performance in the firms within defender business strategy type. The result of H.2 does not agree with the findings of related study (Sabherwal and Chan, 2001). For finding the exact reason we need more research and we can put that in the future researches, but we can attribute the difference to the sample size. Moreover, may due to the culture, according to (Silvius et al., 2009) there is existence of differences in business and information technology alignment maturity between countries.

The highest positive statistical correlation was found in the prospector business strategy type it was significant the value was equal 30%. This percentage means that the alignment have a vital role in improving the overall business performance in the firms within prospector business strategy type. The result of H.3 agree with the findings of related study (Sabherwal and Chan, 2001)

On the other hand, results indicate that there is positive correlation between strategies alignment and business performance in analyzer business strategy type, the value of the correlation coefficient was 17%. This percentage means that the alignment is improving the overall business performance in the firms within analyzer business strategy type. The result of H.4 agrees with the findings of related study (Sabherwal and Chan, 2001).

5.2.2. Result's Discussion

5.2.2.1. Business strategy attributes discussion

Table 5-2: Business strategy attributes Mean and SD

Business Strategy Attributes	No. of Items	Mean	SD
Defensiveness	4	4.34	0.84
Analysis	3	4.16	0.87
Risk Aversion	3	3.80	0.92
Proactiveness	3	3.58	0.99
Futurity	3	3.88	0.97
Aggressiveness	2	3.21	1.12

From the above table, the results shows that the minimum mean (3.21) refers to the Aggressiveness which reasonable result because

according to the table 4-1 the Aggressiveness business strategy attribute should be high in the prospectors but the prospectors firms in the sample didn't exceed 11%. On contrast, the highest mean value (4.34) refers to defensiveness business strategy attribute, this attribute should be medium in both business strategy types analyzer and defender which is represents 89% of the sample. The highest of the defensiveness refers to the nature of the Palestinian market, which is characterized by closed competition, so each firm should defend against the other local firms. The closest business strategy attribute of the highest mean value is Analysis, according to the table 4-1 it should be high in the analyzer business strategy type which is agreed with our findings because the analyzer represent 78% of our sample.

Table 5-3: Business strategy attributes (Mean and SD) per business strategy type

Firm Business Strategy Type	Defensi-veness		Analysis		Risk Aversion		Proact-iveness		Futurity		Aggressive-ness		Total	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Analyzer	4.39	0.79	4.23	0.83	4.84	0.90	3.67	.96	3.99	0.91	3.18	1.16	3.90	1.01
Defender	4.75	0.44	4.14	0.73	3.62	0.97	3.24	0.89	3.57	0.94	3.29	0.85	3.83	0.97
Prospector	3.64	1.07	3.59	1.12	3.67	1.04	3.19	1.21	3.22	1.17	3.37	1.04	3.47	1.10

From the above table, we can conclude that the highest business strategy attributes results was in analysis (4.23), risk aversion (4.84), proactiveness (3.67) and Futurity (3.99) occurred in the analyzer business strategy type, the analysis and risk aversion business strategy attributes agree with analyzer business strategy profile table 4-1. Whilst, the

proactiveness and Futurity business strategy attributes should be medium according to the analyzer profile. The highest aggressiveness value (3.37) refers to the prospectors which agree with prospector profile. Moreover, the highest defensiveness value (4.75) refers to the defender which is agreeing with defender profile. The highest total of business strategy attributes refers to the analyzer, which is agreed with the results of determining the business strategy type of the sample, as we found the maximum business type percentage was the analyzer with (78%). From this results we can conclude that there is just two attributes does not agree with business strategy type profiles, this indicates that there is a good awareness and implementation of the business strategy in the firms.

Table 5-4: Business strategy attributes (Mean and SD) per Firm type

Firm Type	Defensi-veness		Analysis		Risk Aversion		Proact-iveness		Futurity		Aggressiveness		Total	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Banking & financial services	4.22	0.95	4.06	1.01	3.90	0.97	3.35	1.04	3.76	1.06	3.39	1.03	3.80	1.05
Insurance	4.47	0.76	4.33	0.72	3.97	0.91	3.87	0.82	4.07	0.85	3.09	1.21	3.99	1.00
Investment	3.81	1.11	3.58	1.24	3.08	1.24	3.08	1.24	3.13	1.13	2.83	1.27	3.29	1.22
Services	4.50	0.74	4.30	0.68	3.86	0.90	3.86	0.88	4.05	0.84	3.47	1.07	4.03	0.92
Manufacturing	4.28	0.78	4.05	0.89	3.58	0.73	3.35	1.04	3.79	1.02	2.95	1.08	3.69	1.02

From the above table, the results show that the insurance firms have the highest values in analysis (4.33), risk aversion (3.97), proactiveness (3.87) and futurity (4.07) business strategy attributes. In contrast, the highest value of defensiveness (4.50), aggressiveness (3.39) business strategy attributes refers to the services, banking & financial services respectively.

5.2.2.2. Information system strategy attributes discussion

Table 5-5: Information system strategy attributes Mean and SD

Information System Strategy	No. of Items	Mean	SD
Operational Support System	6	3.97	0.77
Interorganizational System	4	3.71	0.95
Market Information System	4	3.48	1.02
Strategic Decision Support System	3	3.75	0.91
Total	17	3.76	0.92

From the above table the results show that the highest information system strategy attributes is Operational support systems (3.97), which represent the use of IS for monitoring and controlling the day-to-day operations. Increased use of IS for operational support would generally be expected to facilitate operational efficiency. According to table 4-2 the Operational support systems attribute should be high in defender, medium in analyzer and low in prospector, This does not agree with our finds because almost of the sample firms classified as analyzer. The lowest information system strategy attributes is Market Information System, which is related to management information systems but with a greater focus on the company's markets and product sales. According to table 4-2 the Market Information System attribute should be low in defender, high in analyzer and prospector. This does not agree with our finds because almost of the sample firms classified as analyzer, so this indicate that there is misunderstanding and misapplication of the information system strategy

which is support our recommendations to increase the awareness of the importance of the information system strategy.

Table 5-6: Information System strategy Attributes (Mean and SD) per business type

Firm Type	Operational Support System		Interorgan-izational System		Market Information System		Strategic Decision Support System		Total	
	M	SD	M	SD	M	SD	M	SD	M	SD
Banking & financial services	3.89	0.82	3.59	0.96	3.37	0.91	3.71	0.82	3.66	0.90
Insurance	4.17	0.74	3.82	0.95	3.42	1.12	3.96	0.86	3.87	0.95
Investment	3.71	0.69	3.00	0.73	3.44	0.96	3.42	1.08	3.43	0.87
Services	3.99	0.63	3.78	0.79	3.76	0.89	4.04	0.63	3.89	0.74
Manufact-uring	3.87	0.86	3.80	1.07	3.42	1.13	3.32	1.07	3.65	1.04

From the above table, the results show that the services firms have the highest total values of information system strategy (3.89). Furthermore, it has highest values of the market information system (3.76) and strategic decision support system (4.04) although the services firms were shaped 25% from the sample. In contrast, the insurance firms have the highest values in operational support system (4.17) and interorganizational system (3.82).

Table 5-7: Information System Strategy Attributes (Mean and SD) per Business Strategy Type

Firm Business Strategy Type	Operational Support System		Interorgan-izational System		Market Information System		Strategic Decision Support System		Total	
	M	SD	M	SD	M	SD	M	SD	M	SD
Defender	3.79	0.68	3.79	0.88	3.54	1.04	3.76	0.68	3.72	0.81
Analyzer	4.04	0.76	3.75	0.95	3.49	1.02	3.76	0.95	3.79	0.93
Prospector	3.61	0.81	3.31	0.98	3.36	1.05	3.59	0.75	3.48	0.90

From the above table, we conclude that the highest operational support system value (4.04) refers to analyzer which does not agree with analyzer profile, back to table 4-2 the defender should focus on the operational support system more than others, and it should be medium in the analyzer. Moreover, the highest value in interorganizational system (3.79) refers to defenders which agree with defender profile according to table 4-2. Furthermore, market information system highest value belongs to defender which does not agree with defender profile according to table 4-2. Additionally, the highest strategic decision support system value (3.76) refers to defender and analyzer which agree with their profiles according to table 4-2. Eventually, the highest total of information system strategy attributes refers to the analyzer which agrees with the results of determining the business strategy type of the sample, as we found the maximum business type percentage was the analyzer with (78%). From

these results we can conclude that there is just two attributes agreed with information system strategy type profiles, this indicates that there is not enough awareness and implementation of the business strategy in the firms.

5.2.2.3. Business Performance attributes discussion

Table 5-8: Performance Attributes (Mean and SD)

Business Performance	No. of Items	Mean	SD
Growth	3	3.34	0.91
Profitability	5	3.38	0.87
Total	8	3.37	0.89

From the above table, the results shows that the mean of profitability (3.38) is bigger than the mean of growth (3.34) which means that the Palestinian firms are focused on the profitability more than growth, the interpretation of these results is due to the nature of the Palestinian market is limited geographically because of the Israel Occupation which Limit the proliferation and expansion of the Palestinian firms, and force the firms to target only the local markets even more but barriers to prevent firms from expand in the local Palestinian market.

Table 5-9: Performance Attributes (Mean and SD) Attributes (Mean and SD) per business type

Firm Type	Growth		Profitability		Total	
	Mean	SD	Mean	SD	Mean	SD
Banking & financial services	**3.29**	**0.84**	**3.37**	**0.80**	**3.34**	**0.81**
Insurance	**3.57**	**0.93**	**3.54**	**0.98**	**3.55**	**0.96**
Investment	**2.17**	**0.94**	**2.95**	**0.76**	**2.66**	**0.90**
Services	**3.23**	**0.89**	**3.51**	**0.73**	**3.40**	**0.80**
Manufacturing	**3.49**	**0.80**	**3.19**	**0.91**	**3.30**	**0.88**

From the above table, the Maximum total performance was in the insurance firm's with mean (3.55). Moreover, the insurance firm's also had the maximum profitability with mean (3.54). Eventually, the maximum growth was in manufacturing with mean (3.49).

Table 5-10: Performance Attributes (Mean and SD) Attributes (Mean and SD) per Business Strategy Type

Firm Business Strategy Type	Growth		Profitability		Total	
	Mean	SD	Mean	SD	Mean	SD
Defender	3.24	0.77	3.03	0.89	3.11	0.85
Analyzer	3.49	0.87	3.39	0.88	3.43	.88
Prospector	3.11	0.93	3.13	0.99	3.13	.96

Depending on the previous table, the highest total of business performance attributes (3.43), the highest growth (3.49) and profitability (3.39) values refers to the analyzer business strategy type which is agreed with the results of determining the business strategy type of the sample, as we found the maximum business type percentage was the analyzer with (78%).

5.2.3. Interviews Discussion

7 interviews were made with three CEO's, three CIO's and one consultant, to discuss our findings and to make sure these findings reflecting the reality of Palestinian firms, Furthermore, to take different view of alignment topic to check if the literature is applied to the Palestinian firms, in addition, to know from local CEO's, CIO's and consultant how to increase the alignment in the Palestinian firms? What is

the obstacles that facing the alignment in the Palestinian firms? How to remove it? Eventually, to document the awareness of the alignment in the Palestinian firms? (Interviews questions in appendix B)

About business and IS/IT strategies, all interviewees argued that there is good implementation to some extent and awareness about business strategy, this awareness and implementation was significantly increased in the last decade but it still not mature enough. One of CEO's said that "Business strategy was started as slogan, then we realized how business strategy is really affect on business, during the time the awareness and the implementation of business strategy will increase".

About IS/IT strategy there are differing views, CEO's said that "we create general strategy for all business", CIO's said that "of course we have IS/IT strategy ",on the other hand, consultant argue that: "there is no enough awareness and implementation of IS/IT strategy from the firm's management, simply the IS/IT strategy is not documented in almost of the Palestinian firms, there is should be more focus on link between IS/IT strategy and business strategy ", which is match with our research findings.

Answers about the IS/IT benefits from the firm's management view, summarized in two points, first: Management realized the availability of data, second: IS/IT helps in decision support, finding answers and support the work progress.

About the *difficulties that facing IS/IT in the Palestinian firms from firms management*, CEO's said that "always we support all firm

departments", CIO's and the consultant agree with this support but they also said "management doesn't realize the IS/ IT role enough and what can the IS/ IT do in the firm." Furthermore, "there is weak in communication with firm management". From interviews we can conclude that the alignment taxonomy is not spread in the management level, maybe it applied in the firms but not in the right way, to take all benefits from IS/IT investments. Furthermore, We can deduce that, there is support from management to IS/IT in the Palestinian firms but this support will be more if the management realize the vital role of IS/IT.

After these questions about strategies, we explain the real meaning of alignment to the interviewees and ask them many questions about it. The first question was *from your opinion is there alignment in your company? And how IS/IT strategy aligned with your company business strategy?* Some of answers was positive about alignment and they felt that there is good collaborate and support between IS/IT and management. Others says that, there is no alignment in their firms because the management always take decisions and IT/IS must implement, IS/IT take no role in decision making. The second question was about *the impacts of misalignment?* The answers can be summarized as follow:

- CEO's: Loss the trust of the stakeholders.
- CIO's and consultant: Loss in the resources of the firm.
- CIO's and consultant: No centralized system in the firm.

The next question was about the *benefits of alignment*. CEO's "agrees on that the work will be done fast in the best way". Other answers centered on "business goals will be achieved with minimum cost".

Question before the last, was about *the most important reason of the misalignment*? From CEO's answers we can summarize that "management focus on the final service/product that produced to the customer regardless of thinking about the things that IS/IT can do to make this process more efficient, effective and less cost". CIO's said that "management are not realize the real meaning of IS/IT ". The last question was about their *recommendations to achieve alignment?* We can deduce from the answers, the following two points first, Management should Increase awareness of IT. Second IT should take a role in decision making.

5.3. Recommendations

From above discussion and analyze the using of strategies, and the current alignment implementation in the Palestinian firms, and the impacts of the alignment on the business performance, the following recommendations are suggested to be considered:

- It is highly recommended to perform studies and researches in each Palestinian firm to determine the best business strategy that fits it business environment and fit the Palestinian market.
- It is recommended to work on changing employees culture toward strategies and IS/IT by Management. Firms can achieve this purpose by reviewing their strategies and the structure of all firm

departments; then shape and document the strategies, and share these strategies with each employee.

- Encourage firm's employees to participate in local, regional and international workshops and events in the field of technology and strategy.
- Firms In order to take all benefits from IS/IT investment, it is recommended to make studies and researches even take consultations before investment in IS/IT to make sure that the new investment is right and fit the firm business strategy.
- IS/IT departments should play a vital role in shaping the business strategy and decision making.
- Firms should keep monitoring the new technologies and the changing of IS/IT, and update their IS/IT by considering their business strategy, to make sure having the maximum business performance improving.
- Review the firm business strategy and IS/IT alignment continuously, and consider this process as management duty, due to the alignment impacts on improving business performance.
- It is highly recommended to improve the awareness of business strategy and IS/IT strategy alignment benefits and the importance among the Palestinians firm's employees.
- It is recommended to redesign the firms processes and structure to achieve business strategy and IS/IT strategy alignment.

5.4. Future Studies:

- Studying why business strategy and IS/IT strategy alignment impact on business performance?
- Study the other factors that affect the Palestinian firm's business performance.
- Studying the current business strategy and IS/IT strategy alignment maturity level.
- Study the factors that can affects the business strategy and IS/IT strategy alignment maturity level in the Palestinian firms.

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Appendix A: Questionnaire

Questionnaire of

The impact of IS/IT strategy and business strategy alignment on business performance in the Palestinians firms

Dear Sir/Mrs.

This research aims to check The impact of IS/IT strategy and business strategy alignment on business performance in the Palestinians firms. By studying the application of the company's business strategy and information systems applied in the company and analyze the reality and come up with recommendations and the results will help companies to develop and increase the performance of work by focusing on the process of compatibility.

We believe that you are the best source to reach the required information, which serve our community and its development. We all hope to find cooperation from you through answering the questions contained in this survey. We pledge not to enclose the identity of participants to third party, as well as not use these information in any field except scientific research.

Best Regards,

Researcher

Part 1: Personal Information

1. **Firm Name ____**

2. **Firm Business Type**

☐ **Manufacturing** ☐ **Insurance** ☐ **Services**

☐ **Banking & financial services** ☐ **Investment** ☐**Others**

3. **The Governorate:**

☐ **Jenin**	☐ **Tulkarm**	☐ **Hebron**	☐ **Ramallah and Berih**	☐ **Nablus**
☐ **Tubas**	☐ **Jerusalem**	☐ **Qalqelah**	☐ **Salfeet**	☐ **Betlahem**
☐ **Deralbalah**	☐ **Khanyonis**	☐ **Gaza**	☐ **Rafah**	☐ **Jerico and Valleys**

Part 2: Business strategy questions

	Items of measurement	Least	Less	Medium	More	Most
Defensiveness	DEF1: We develop strong relationships with our suppliers.					
	DEF2: We develop strong relationships with our customers.					
	DEF3: We optimize coordination across our departments and/or product lines.					
	DEF4: There is a constant drive to improve operating efficiency.					

	Items of measurement	Least	Less	Medium	More	Most
Analysis	ANALY1: We tend to be number-oriented and analytical in our operations.					
	ANALY2: We require detailed, factual information to support our day-to-day decision making.					
	ANALY3: We develop comprehensive analyses of each business opportunity or challenge we face.					
Risk Aversion	RSKAVR1: Our business decisions generally follow "tried and true" paths.					
	RSKAVR2: We adopt a rather conservative view when making major decisions.					
	RSKAVR3: In general, our mode of operations is less risky than that of our competitors.					
Proactiveness	PROACT1: We generally increase capacity (i.e., prepare to handle a greater volume of business) before our competitors do the same.					
	PROACT2: We are usually the first ones to introduce various products and/or services in the market.					
	PROACT3: We adopt innovations early.					
Futurity	FUT1: The performance measures reviewed by the senior management team emphasize our long-term business effectiveness.					
	FUT2: Our criteria for budget allocations generally reflect long-term considerations.					

	Items of measurement	Least	Less	Medium	More	Most
Aggressiveness	AGGR1: We sacrifice current profitability to gain market share.					
	AGGR2: Gaining market share is more important than cash flow.					
	AGGR3: We frequently use price-cutting to increase our market share.					

Part 2: Information system strategy questions

	Items of measurement	least	less	medium	more	most
Operational Support System	ISOPSUP1: Our IS improve the efficiency of our day-to-day operations					
	ISOPSUP2: Our IS support effective coordination across functions (e.g. marketing, manufacturing) and product lines.					
	ISOPSUP3: Our IS provide us with the facts and figures we need to support to day-to-day decision making					
	ISOPSUP4: Our IS enable us to develop detailed analyses of our present business situation.					
	ISOPSUP5: Our IS provide sufficiently detailed information to support prudent decision making.					
	ISOPSUP6: Our IS support detailed analyses of major business decisions					

	Items of measurement	least	less	medium	more	most
Interorganizational System	ISIOR1: Our IS enable us to develop stronger links with suppliers					
	ISIOR2: Our IS enhance our ability to negotiate with our suppliers					
	ISIOR3: Our IS enhance our ability to negotiate with our customers					
	ISIOR4: Our IS enable us to develop stronger links with customers					
Market Information System	ISMARK1: Our IS assist us in setting our prices relative to the competition					
	ISMARK2: Our IS help us introduce new products and/or services in our markets					
	ISMARK3: Our IS help us monitor changes in our market share					
	ISMARK4: Our IS permit us to rapidly adjust our prices					
Strategic Decision Support System	ISFUT1: Our IS facilitate strategic business planning					
	ISFUT2: Our IS help us to model possible future outcomes if alternative courses if action					
	ISFUT3: Our IS are used to forecast key indicators of business performance					

Part3 :Business Performance questions

	Items of measurement	more than worse	worse	equivalent	better	more than better
Growth	G1: Market share gains related to competition in the past 3 years					
	G2: Sales growth in the past 3 years					
	G3: Revenue growth in the past 3 years					
Profitability	B1: Return on investment in the past 3 years					
	B2: Return on sales in the past 3 years					
	B3: Liquidity in the past 3 years					
	B4: Cash flow in the past 3 years					
	B5: Profitability in the past 3 years					

استبانة حول

دراسة أثر توافق استراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) وإستراتيجية العمل على أداء العمل في الشركات الفلسطينية

الأخ الفاضل / الأخت الفاضلة

يسعى الباحث في هذه الاستبانة الى دراسة أثر التوافق بين استراتيجية تكنولوجيا المعلومات واستراتيجية العمل على أداء العمل في الشركات الفلسطينية، من خلال دراسة واقع تطبيق استراتيجية العمل في الشركة وأنظمة المعلومات المطبقة في الشركة وتحليل الواقع والخروج بتوصيات ونتائج تساعد الشركات على تطوير وزيادة اداء العمل من خلال التركيز على عملية التوافق.

وحيث نؤمن أنكم خير مصدر للوصول الى المعلومات المطلوبة، و نعهد بكم الاهتمام و الاستعداد لمؤازرة الأبحاث العلمية التي تخدم مجتمعنا و تطوره. نتوجه اليكم و كلنا أمل أن نجد التعاون من قبلكم، وذلك من خلال الاجابه على الأسئلة المحتواه في هذه الاستبانة، و التي نتعهد لكم بالمحافظة على عدم اظهار هوية المجيب عنها، و عدم استخدامها في اي مجال غير مجال البحث العلمي.

و لكم جزيل الشكر و العرفان,,,

الباحث,,,

الجزء الأول: (المعلومات الشخصية)

1. **إسم الشركة:** ______________________________

2. **طبيعة عمل المؤسسة؟**

☐ **خدمات** ☐ **تأمين** ☐ **صناعة**

☐ **بنوك وخدمات مالي** ☐ **إستثمار** ☐ **أخرى**

3. **المحافظة:**

☐ **نابلس** ☐ **رام الله والبيرة** ☐ **الخليل** ☐ **طولكرم** ☐ **جنين**

☐ **بيت لحم** ☐**سلفيت** ☐ **قلقيلية** ☐ **القدس** ☐ **طوباس**

☐ **أريحا والأغوار** ☐ **رفح** ☐ **غزة** ☐ **خان يونس** ☐ **دير البلح**

الجزء الثاني: (استراتيجية الشركة) :أرجو اختيار الدرجة التي تتناسب مع استراتيجية العمل المطبقة في الشركة.

		(من الأقل ← الأعلى)				
		نادرا	**قليلا**	**احيانا**	**غالبا**	**دائما**
الدفاعية	**من أولولوياتنا أن نسعى الى تطويرعلاقة قوية مع الموردين**					
	من أولولوياتنا أن نسعى الى تطوير علاقة قوية مع الزبائن					
	نسعى الى تحسين التعاون والتنسيق بين الاقسام حتى يصل الى الدرجه المثالية					
	نسعى الى الاستمرارية في تحسين كفاء عمليات الشركة بشكل مدروس					
التحليل	**نعتمد على التحليل والارقام في القيام بعمليات الشركة المختلفة**					
	نحتاج الى التفاصيل والمعلومات الدقيقه،الواقعيه في عملية اتخاذ القرارات اليومية					
	نقوم باجراء تحليل شامل لكل (فرصة عمل، تحدي) جديد/ة					
المحافظ / الحذر	**تعتمد قراراتنا على طرق و اساليب مجربة وواقعية**					
	نتبنى نظرة محافظة (غير اندفاعية) عند اتخاذ قرارات جوهرية					
	طريقة ادارتنا للعمليات اقل خطورة من المنافسين					

		(من الأقل ← الأعلى)				
		نادرا	قليلا	احيانا	غالبا	دائما
الاندفاعية	مثل: [نزيد القدرة على الاستجابة للتغيرات]زيادة كميات انتاج (المنتجات/الخدمات) قبل المنافسين					
	نحن في الغالب اول من يقدم (المنتجات، الخدمات) جديده في السوق					
	نتبنى في الغالب الابتكارات الجديدة في (المنتج ، الخدمة) قبل جميع المنافسين					
المستقبلية	يقوم فريق من الادارة العليا بالتحقق من الى زيادة كفاءة ان مقاييس الاداء توصلنا العمل على المدى البعيد					
	يتم توزيع الميزانية بناءا على الاهداف بعيدة المدى					
العدائية	نسعى وراء زيادة الحصة السوقيه بين المنافسين على حساب الربح الآني					
	نسعى وراء زيادة الحصة السوقيه بين المنافسين على حساب السيولة المادية					
	نعمل على تقليل الاسعار لزيادة الحصة السوقيه بين المنافسين					

الجزء الثالث: (استراتيجية أنظمة المعلومات) :أرجو اختيار الدرجة التي تتناسب مع الاستراتيجية المطبقة في الشركة.

		(من الأقل ← الأعلى)				
		نادرا	قليلا	احيانا	غالبا	دائما
أنظمة دعم العمليات	تحسن انظمة المعلومات المطبقة في الشركة كفاءة العمليات اليومية اللازمة لإتمام العمل					
	تحسن انظمة المعلومات المطبقة في الشركة التنسيق بين الاقسام (تسويق، المالية، التصنيع) و (المنتجات/الخدمات) المخرجة					
	تزودنا انظمة المعلومات المطبقة في الشركة ببيانات وجداول ورسومات بيانيه لتدعيم اتخاذ القرارت اليومية					
	تمكننا انظمة المعلومات المطبقة في الشركة من عمل تحليل تفصيلي لوضع العمل الحالي					
	تقدم انظمة المعلومات المطبقة في الشركة بيانات تفصيلية كافية لدعم اتخاذ القرارات التي يوجد بها مخاطرة					
	تدعم انظمة المعلومات المطبقة في الشركة عمل تحليل تفصيلي للقرارات (					

	الرئيسية والمفصلية)					
أنظمة التكامل	تمكننا انظمة المعلومات المطبقة في الشركة من تقوية التواصل مع الموردين					
	تعزز انظمة المعلومات المطبقة في الشركة القدرة على التفاوض مع الموردين					
	تعزز انظمة المعلومات المطبقة في الشركة القدرة على التفاوض مع الزبائن					
	تمكننا انظمة المعلومات المطبقة في الشركة من تقوية التواصل مع الزبائن					
أنظمة المعلومات عن السوق	نستخدم انظمة المعلومات المطبقة في الشركة في تقييم اسعارنا مقارنة بالمنافسين					
	تساعدنا انظمة المعلومات المطبقة في الشركة على تقديم (منتجات / خدمات) جديدة					
	تساعدنا انظمة المعلومات المطبقة في الشركة على مراقبة التغيرات في الحصة السوقية					
	تمكننا انظمة المعلومات المطبقة في الشركة في تعديل اسعارنا بسرعة مناسبة					
أنظمة دعم القرارت الاستراتيجية	تسهل انظمة المعلومات المطبقة في الشركة عملية التخطيط الاستراتيجي					
	تساعدنا انظمة المعلومات المطبقة في الشركة في دراسة نتائج الاستراتيجيات المختلفة واثرها					
	نستخدم انظمة المعلومات المطبقة في الشركة في توقع المؤشرات الاساسية للأداء					

الجزء الرابع: (أداء المؤسسة) :أرجو اختيار الدرجة التي تتناسب مع أداء الشركة.

		(من الأقل ← الأعلى)				
		منخفضة جدا	منخفضة	متساوية	عالية	عالية جدا
النمو / التوسع	مدى (زيادة ، تطور) الحصه السوقية في الثلاثة اعوام السابقة بالمقارنة مع المنافسين					
	مدى زيادة المبيعات في الثلاثة اعوام السابقة بالمقارنة مع المنافسين					
	مدى زيادة العوائد في الثلاثة اعوام السابقة بالمقارنة مع المنافسين					
الارباح	قيمة العائد على الاستثمار في الثلاثة اعوام السابقة بالمقارنة مع المنافسين					
	قيمة العائد من مبيعات في الثلاثة					

					اعوام السابقة بالمقارنة مع المنافسين	
					قيمة السيولة المتوفرة في الثلاثة اعوام السابقة بالمقارنة مع المنافسين	
					قيمة التدفق المالي المتوفرة في الثلاثة اعوام السابقة بالمقارنة مع المنافسين	
					قيمة الربح في الثلاثة اعوام السابقة بالمقارنة مع المنافسين	

Appendix B: **INTERVIEWS Questions**

1. Interest of firms in BS and ITS? Clear strategies? Clear link between IT and Organization Strategy?

2. Enter the IT on work, benefits? From IT and From Management views?

3. Difficulties face IT– general, from management?

4. IT knows about alignment? Management hears about it?

5. CEO partnership, commitment? Infrastructure development?

6. Employees understand strategy, communications?

7. Cross functional integration?, cooperation?

8. Is there alignment? How is your IT strategy aligned with your company strategy,

9. If there is alignment what is the   from your perspective? If still gap? What is the impact?

10. Reasons of misalignment? Most important one?

11. Recommendation to achieve alignment?

12. IT, Alignment has any role in generating competitive advantage, improve performance?

13. Whether your internal IT infrastructure is well integrated with your Business strategy?

Appendix C: **Arbitrators and experts who reviewed the questionnaire**

Name	**Position**	**Organization Name**
Dr. Muen Jabber	Instructor of Statistics	Betlahem University
Dr. Husam Araman	Assistance Professor Coordinator of Master of Engineering Management Program, ToT & Academic Assistant - CELT	Al-najah University
Mr. Mahmoud Bishawi	Head of SW development department	Nablus municipality
Mr. Arafat Alawneh	Chief Information Officer (CIO)	Nablus municipality
Mr. Emad Al-Masri	Manager (CEO)	DOT technology company
Eng. Asem Al-Masri	Technology consultant	Hulul, Palestinian Telecommunication
Eng. Rasheed Abu Eideh	Chief Information Officer (CIO)	DOT technology company
Mr. Ammar Al Najjar	Financial Manager	Nablus municipality

جامعة النجاح الوطنية

كلية الدراسات العليا

أثر توافق استراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) وإستراتيجية العمل على أداء العمل في الشركات الفلسطينية

إعداد
محمد حسن هلالي

إشراف
د .بكر عبد الحق

قدمت هذه الأطروحة استكمالاً لمتطلبات درجة الماجستير في برنامج الادارة الهندسية بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس - فلسطين

2012

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إعداد
محمد حسن هلالي
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الملخص

النمو المذهل لأنظمة وتكنولوجيا المعلومات في العقدين المنصرمين ، له اثار واضحة وكبيره على جميع جوانب الحياة وخاصة في الاعمال التجارية، هذا التطور أصبح محفز استراتيجي لتمكيننا القيام بالاعمال بشكل جديد، علاوة على ذلك، اصبحت أنظمة وتكنوليوجا المعلومات تلعب دورا جوهريا في تنفيذ العمل، واصبحت جزءا أساسيا في جميع اجزاء العمل. أجبرت التكنولوجيا مثل الانترنت والتجارة الاكترونية العديد من الشركات مراجعة إستراتيجيات الشركة واستراتيجية تكنولوجيبا المعلومات وإعتماد فلسلفة التوافق بينهم ، لتعزيز مكانتهم بين المنافسين و وتحقيق أهداف العمل والاستفادة الكاملة من الاستثمار في التكنولوجيا . أكدت الدراسات السابقة ان موضوع التوافق بين استراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) واستراتيجيع العمل هو موضوع مهم جدا ويعتبر واحد من اهم اهتمامات الادارة العليا. عملية التوافق هي عملية مستمرة ومعقدة وتستغرق وقت للتطور وتحتاج الى بذل الجهد للحفاظ عليها.

يهدف هذا البحث إلى دراسة وتحديد أثر توافق استراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) وإستراتيجية العمل على أداء العمل في الشركات الفلسطينية، لتحقيق هذا الهدف تم استخدام منهجية البحث النوعي والكمي. وقد تم جمع البيانات النوعية من خلال المقابلات التي أجريت مع المدراء التنفيذيين ومدراء تكنولوجيا المعلومات والخبراء، للتأكد من مطابقة النتائج لواقع الشركات الفلسطينية والى زيادة وصف وفهم عميلة التوافق في الشركات الفلسطينية. الجزء الكمي من البحث يعتمد على دراسة سابقة، تم جمع البيانات الكمية من عينة

البحث والتي تتكون من جميع الشركات الفلسطينيينة المدرجة في بورصة فلسطين وعددها 46 شركة باستخدام باستخدام طريقة الاستبانة حيث تم تصميمها وتوزيعها على كل إفراد العينة البحثية. وكان معدل استجابة العينة (46٪).

تشير النتائج إلى أن هناك علاقة إيجابية بين توافق إستراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) وإستراتيجية العمل على أداء العمل الش ركات الفلسطينية ، وبلغت قيمة معامل الارتباط (0.27).

قام الباحث بناء على نتائج البحث بتقديم توصيات ل لشركة الفلسطينية بإجراء الدراسات والأبحاث لتحديد أفضل إستراتيجية عمل تتلاءم مع بيئتها التجارية وتناسب السوق الفلسطيني. وعلاوة على ذلك، يوصي بزيادة الشركات الفلسطينية التركيز على إستراتيجية تكنولوجيا المعلومات. يوصي الباحث أيضا، إجراء الدراسات والبحوث وإجراء الاستشارة اذا لزم قبل أي استثمار في تكنولوجيا المعلومات، للتأكد من أن هذا الاستثمار الجديد هو الصحيح والمناسب لإستراتيجية عمل الشركة. أخيرا، يوصي الشركات بضرورة مراجعة التوافق بين إستراتيجية عمل الشركة وإستراتيجية (أنظمة المعلومات / تكنولوجيا المعلومات) بشكل مستمر، وإعتبار هذه العملية واجب من واجبات الإدارة، بسبب الآثار الايجابة المترتبة عن هذة العملية على تحسين أداء العمل.